

B-10

Map of the

**BUFFALO FORGE COMPANY**  
**BUFFALO, NEW YORK**

Map of the

**FANS**  
**BLOWERS**  
**ACCESSORIES**

B-10





OCTOBER 15, 1936

BUFFALO FORGE CO.

## DISCOUNTS to Net Selling Prices

APPLYING TO EXHAUST FANS AND BLOWERS

*Effective October 15, 1936*

The logo features the word "Buffalo" in a stylized, cursive script. The letters are bold and interconnected, with a slight shadow or outline effect. The logo is positioned on the left side of the central text block.

### NOTICE

Prices subject to change without notice.

TERMS: 30 DAYS NET

Prices Based on Delivery, F. O. B. Cars, Buffalo, N. Y.

The logo features the word "Buffalo" in a stylized, cursive script. The letters are bold and interconnected, with a slight shadow or outline effect. The logo is positioned on the right side of the central text block.

Buffalo Forge Co.

Phone CLev. 4567

Buffalo, N. Y.

Buffalo Breezo Fans (Catalog 2321-K) .....	25%
Buffalo Pulley Breezo Fans (Circular 2578) .....	20%
Home Ventilating Units (Circular 2892-C) .....	25%
Breezo Cooling Fans (Circular 2977) .....	25%
Breez-Air Attic Fans (Circular 3018) .....	25%
Electric Blowers (Circular 2386-A) .....	25%
Baby Conoidal Fans (Circular 475-D) .....	25%
Buffalo Volume Fans (Circular 2507-D) .....	30%
Buffalo Steel Pressure Blowers (Catalog 410-E) .....	20%
Buffalo Standard Mill Exhausters (Catalog 410-E) .....	20%
Buffalo "HVA" Blower Fans (Circular 2947-A) .....	25%
"HVA" Blower Fans with Motor and V-Belt (Circular 3044) ....	25%



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Effective Oct. 15, 1936

## NET PRICES and DATA On Exhaust Fans and Blowers

All Prices Shown in this Section are F.O.B., Buffalo, N. Y.

Buffalo Forge Company

Buffalo, New York

### Buffalo Breezo Fans

Catalog No. 2321-K

#### ALTERNATING CURRENT Single Phase—60 Cycle, Constant Speed

Code Word	Size	Speed R.P.M.	Cap. Cu. Ft.	Weight, Lbs. Net Ship.		Price	
						110 v	220 v
BOD	8"	1500	500	5	6	\$17.50	
BACK	12" A	750	460	18	25	30.10	
BAND	12" B	1150	700	18	25	30.10	\$30.10
BAMA	12" C	1725	1060	18	25	30.10	30.10
BAOC	Same as BAND, except choke coil with 3-speed regulator. No radio interference					37.80	37.80
BAG	16" A	850	1100	36	50	37.80	37.80
BAKE	16" B	1150	1500	36	50	37.80	37.80
BARE	18" A	850	1800	44	60	62.30	62.30
BARK	18" B	1150	2400	44	60	62.30	62.30
BASE	24" A	670	3200	85	115	105.00	105.00
BASK	24" B	850	4000	85	115	105.00	105.00
BEACH	30" A	670	6200	165	220	121.00	121.00

Code indicates 110 volt—prefix letter O for 220 volt.

#### NOTES

All Breezo Fans listed are carried in stock. Motors are totally enclosed. Wool packed bearings on all sizes. Ball-bearings for vertical operation, 10% extra. Shipment Ball-bearing fans 3 weeks, except on 12", 16" and 18"; 110V. 60 cy., single phase, 1140 R.P.M. motors are stocked. Ball Bearing Motors cannot be furnished on 8" fans.

This is a most reliable motor and possesses all the desirable characteristics of a motor used in the home. There are no brushes, no starting switch and no radio interference.

General Electric type BA series wound commutating Motor. Speed may be varied. Add \$5.00 extra for 6-speed regulator. These motors may cause radio interference.

Both General Electric and Emerson Motors stocked. These are of the constant speed split-phase type, have no brushes and do not interfere with radio. The 1725 revolution motor is of Emerson make and stocked only for 110 volts, but can be furnished in 3 weeks for 220 volts at same price.

Both General Electric and Emerson Motors are stocked. Motors are of the constant speed, split-phase type. They have no brushes and do not interfere with radio. Note either of two speeds can be had at same price. Use correct code word for speed wanted.

General Electric Motors are of the capacitor type with the condenser in a separate box. No starting switch or brushes. A speed controller can be used with these motors. For prices, see next page. Emerson Motors for these sizes are split-phase types and the speed cannot be varied.

### Buffalo Breezo Fans

#### Three Phase—60 Cycle—220 Volt

Code Word	Size	Speed R.P.M.	Cap. Cu. Ft.	Weight, Lbs. Net Ship.		Price
BEDL	18"	850	1800	44	60	\$62.30
BECK	18"	1150	2400	44	60	62.30
BID	24"	850	4000	85	115	105.00
BLACK	24"	670	3200	85	115	105.00
BLAZE	30"	670	6200	165	220	121.00
BLOS	36"	575	10,000	220	275	191.80



Emerson Motors in stock for 220 volt, at either 850 or 1150 revolutions. Motors for 110 volt or 440 volt furnished at same price in 3 weeks. Regulators giving 30% speed variation can be furnished. Price depends upon voltage available.

General Electric and Emerson Motors for both 220 volt and 440 volt are stocked. Note the 24" size may be had for either 670 or 850 revolutions. Regulators giving 30% speed variation can be furnished for use with the Emerson Motors. Prices depend on the voltage available. 36" only with Emerson Motors.



## Buffalo Breezo Fans

### DIRECT CURRENT

Code Word	Size	Speed R.P.M.	Cap. Cu. Ft.	Weight, Lbs.		Price	
				Net	Ship.	110 v	220 v
BOX	12" A	750	460	18	25	\$30.10	
BRAQ	12" B	1150	700	18	25	30.10	\$30.10
BRICK	16" A	850	1100	36	50	37.80	37.80
BROAD	16" B	1150	1500	36	50	37.80	37.80
BROOM	18" A	850	1800	44	60	62.30	62.30
BROW	18" B	1150	2400	44	60	62.30	62.30
BRUSH	24" A	670	3200	85	115	105.00	105.00
BUFF	24" B	850	4000	85	115	105.00	105.00
BULB	30" A	670	6200	160	220	121.00	121.00
BURD	36" A	575	10,000	220	275	191.80	191.80

Code indicates 110 volt—prefix letter O for 220 volt.

### Regulators for Direct Current Motors

Code Word	Size	Price	
		110 v	220 v
BYOLX	16"	\$8.50	\$8.50
BYOMY	18"	8.50	8.50
BYONZ	24"	13.00	13.00
BYORC	30"	15.00	15.00
BYOZL	36"	20.00	20.00

Code indicates 110 volt—prefix letter O for 220 volt.

## Buffalo Breezo Fans

### CAPACITOR MOTORS WITH VARIABLE SPEED CONTROLS

Code Word	Synchronous			Weight, Lbs.		Price
	Size	Speed		Net	Ship.	
BOCON	12"	1200	Maximum Speed 90% Medium Speed 75% and Minimum Speed 60% of Synchronous Speed.	18	25	\$46.90
BOCAK	16"	1200		36	50	54.60
BOCEL	18"	1200		44	60	70.00
BOCIM	24"	900		85	115	124.60
BOCUP	30"	720		165	220	135.28
BEAR	36"	600		220	275	248.50

### NOTES

All Breezo Fans listed are called in stock. Motors are totally enclosed with packed bearings on all sizes. Bearings for vertical operation, 10¢ extra. Shipment Ball-bearing fans 3 weeks.

These motors are General Electric series wound. Speed may be varied. net extra for 6-speed regulator.

General Electric and Emerson Motors available for either speed. Regulators may be used on all sizes and are priced below. These are 50% speed reduction.

Emerson Motors stocked on these sizes. They are series wound and may be thrown directly on the line—no starters being required. Regulators, giving 50% speed reduction are priced below.



Regular

These Regulators are of the enclosed type and give six speeds.



Fan with Capacitor Motor and 3-Speed Regulator (See below)

These motors are of the capacitor or condenser type for operation on single phase, 60 cycle circuits. These are very quiet, do not interfere with radio and are equipped with controllers giving three or more speeds.

The starting current is very low rendering them suitable for operation on lighting circuits.

All of these motors are interchangeable for 110 and 220 volts.

General Electric Motors stocked for all sizes except 36". Emerson Motors stocked for 12"-16" only, but can be furnished for all other sizes in 3 weeks.



## Buffalo Breezo Fans

### ALTERNATING CURRENT

#### Single Phase—25 Cycle, Constant Speed

Code Word	Size	Speed R.P.M.	Cap. Cu. Ft.	Weight, Lbs. Net Ship.	Price 110 v	Price 220 v
BALO	8"	1300	450	6 7	\$22.50	
BLOT	12" A	750	460	18 25	30.10	
BLUNT	12" B	1150	700	18 25	30.10	\$30.10
BLOM	12" C	1440	1250	18 25	30.10	30.10
BLAS	16" A	720	950	36 50	37.80	37.80
BOAT	16" B	1450	1850	36 50	37.80	37.80
BODE	18" A	700	1500	44 60	62.30	62.30
BOND	18" B	1440	3000	44 60	62.30	62.30
BOOM	24" A	700	3300	85 115	105.00	105.00
BOSS	30" A	700	6500	165 220	121.00	121.00

Code indicates 110 volt—prefix letter O for 220 volt.

#### NOTES

All Breezo Fans listed are carried in stock. Motors are totally enclosed. Wool packed bearings on all sizes. Ball-bearings for vertical operation, 10% extra. Shipment Ball-bearing fans 3 weeks. Ball Bearing Motors cannot be furnished on 8" fans.

This is a shaded pole motor, no brushes and no radio interference. Same type as used on 60 cycles, except a small condenser is required and is furnished with the motor.

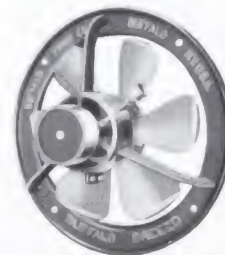
The motors stocked for 25 cycle are all of the same types as the 60 cycle motors described above—the difference being in the speeds obtainable which changes the capacities.

## Pulley Breezo Fans

### Circular No. 2578

Code Word	Size	Description	Price
ACPEW	16"	Pulley Breezo Fan	\$25.00
ACPIX	18"	Pulley Breezo Fan	28.00
ACRAW	24"	Pulley Breezo Fan	32.00
ACREY	30"	Pulley Breezo Fan	48.00
ACROZ	36"	Pulley Breezo Fan	60.00

Type "K" Disk Fans. Prices on Application.



## Accessories for Breezo Fans

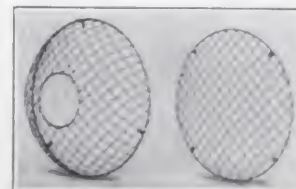
### Net Extra for Brass Wheels

16"—\$8.40	18"—\$10.50	24"—\$13.65
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Not available in sizes other than the three listed.

### Wire Guards

Motor Side			Wheel Side		
BAAKZ	12"	\$5.04	BAAVK	12"	\$3.92
BAALE	16"	5.74	BAAXM	16"	4.27
BAAAC	18"	6.58	BAAZP	18"	4.52
BAAFF	24"	11.48	BACIZ	24"	4.90
BAAAG	30"	14.70	BADAY	30"	7.00
BAAAH	36"	18.06	BADEZ	36"	10.64



Guards for the motor side are not exactly the same for General Electric and Emerson Motors. When ordering these guards separate, for a fan already installed, specify make of motor on the fan.



**Buffalo Automatic Louvers**

Code Word					
BABHO	BABIP	BABOW	BABTA	BABUB	BABSA
12"-\$ 7.00	16"-\$ 9.80	18"-\$12.60	24"-\$19.60	30"-\$23.80	36"-\$29.40

**Buffalo Penthouses without Louvers**

Code Word					
BACEN	BACRA	BACUD	BADAL	BADER	BADSO
12"-\$32.90	16"-\$35.00	18"-\$35.00	24"-\$52.50	30"-\$71.40	36"-\$95.20

**Buffalo Home Ventilating Units****Circular No. 2892-C****12" Breezo—Home Ventilating fan with short panel for glass and Stop and Start Switch**

Code Word				Weight	Price
BUSH	110 volt	25 cycle	1450 R.P.M.	35 lbs.	\$37.80
BUSS	110 volt	60 cycle	1150 R.P.M.	35 lbs.	37.80
BUSY	110 volt Direct Current	1150 R.P.M.	35 lbs.	37.80	

NOTE: Short panel adjustable 26" to 36"—medium panel 36" to 46"—Long panel 46" to 60". When medium panel is wanted prefix "M"—for long panel prefix "L".

**12" Breezo Home Ventilating Fan with Stop and Start Switch only**

Code Word				Weight	Price
BUCAS	110 volt	25 cycle	1450 R.P.M.	28 lbs.	\$32.90
BUCET	110 volt	60 cycle	1150 R.P.M.	28 lbs.	32.90
BUCIV	110 volt Direct Current	1150 R.P.M.	28 lbs.	32.90	

**12" Breezo—Home Ventilating fan with short panel for glass and Reversing Switch**

Code Word				Weight	Price
BULK	110 volt	25 cycle	1150 or 750 R.P.M.	35 lbs.	\$37.80
BUMP	110 volt	60 cycle	1150 or 750 R.P.M.	35 lbs.	37.80
BURR	110 volt Direct Current	1150 or 750 R.P.M.	35 lbs.	37.80	

NOTE: Short panel adjustable 26" to 36"—Medium panel 36" to 46"—Long panel 46" to 60". When Medium panel is wanted prefix "M"—for long panel prefix "L". Prefix letter "H" when 1150 R.P.M. Motor is wanted.

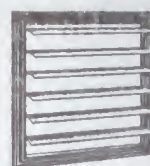
**12" Breezo—Home Ventilating fan with Rev. Switch only**

Code Word				Weight	Price
BUTTE	110 volt	25 cycle	1150 or 750 R.P.M.	28 lbs.	\$32.90
BUTTER	110 volt	60 cycle	1150 or 750 R.P.M.	28 lbs.	32.90
BUZZ	110 volt Direct Current	1150 or 750 R.P.M.	28 lbs.	32.90	

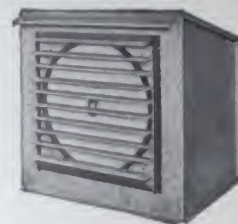
Prefix letter "H" for 1150 R.P.M. Motor.

**12" Breezo Home Ventilating Fans with All-Metal Panels**

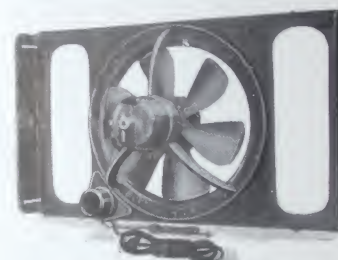
Made in 3 sizes adjustable 22" to 26"—26" to 36" and 36" to 46". Prices same as Breezo Fans with panels for glass.



Louver

Penthouse,  
with Louver

These panels are arranged for the insertion of two pieces of window glass, the exact width of which depends upon the width of the window, hence the necessity of securing the glass locally. If the obstruction of light is not of importance the panels of solid metal can be furnished at the same price. Add word METAL to the code. These motors are constant speed split-phase type, do not interfere with radio. General Electric and Emerson motors both stocked.

Buffalo Breezo Glass Panel  
Window Ventilating Fan

These reversible motors are General Electric series wound, commutating type BA. They are equipped with brushes and may interfere with radio. Reversible fans for ventilating the home are not very practical when fan is installed in the kitchen since the blowing of outside air into the kitchen would force the hot air and odors of the kitchen into the other rooms of the home. The capacity of the fan when reversed is reduced about 25%.

The All-metal panels are the same as those for glass, except they are solid and offer more obstruction to light. Add word METAL to the code.



## Buffalo Wall Boxes

### Circular No. 2892-C

These are the latest development for ventilating the home. For the new house, and all others where it is practical to provide the necessary opening in the wall, they are strongly recommended.

#### BUILT-IN TYPE

##### 8" Buffalo Home Ventilating Units—60 cycles, 110 volts, single phase, 1500 R.P.M.

Code Word	Description	Capacity	Price
BODAL	Buff Enamel Finish, with 8" fan complete	500 cu. ft.	\$26.70
BOSTA	Stainless Steel Finish, with 8" fan complete	500 cu. ft.	\$30.00

##### 8" Buffalo Home Ventilating Units—25 cycles, 110 volts, single phase, 1300 R.P.M.

Code Word	Description	Capacity	Price
BOTFY	Buff Enamel Finish, with 8" fan complete	450 cu. ft.	\$31.60
BOFTO	Stainless Steel Finish, with 8" fan complete	450 cu. ft.	\$35.00

#### BUILT-IN TYPE

##### 12" Buffalo Home Ventilating Units—60 cycles, 110 volts, single phase, 1150 R.P.M.

Code Word	Description	Capacity	Price
BAEBS	Complete with 12" fan	700 cu. ft.	\$56.00

##### 12" Buffalo Home Ventilating Units—25 cycles, 110 volts, single phase, 1150 R.P.M.

Code Word	Description	Capacity	Price
BATTY	Complete with 12" fan	700 cu. ft.	\$56.00

##### 12" Buffalo Home Ventilating Units—Direct Current, 110 volts, 1150 R.P.M.

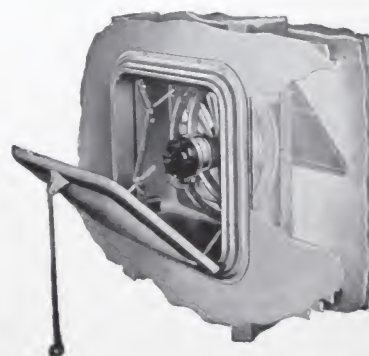
Code Word	Description	Capacity	Price
BADIR	Complete with 12" fan	700 cu. ft.	\$56.00

A reversing switch can be furnished with any of the 12" units for a net extra charge of ..... **\$5.60**



Buffalo Built-In Type  
8" Home Ventilating Unit

The 8" is of ample capacity for the average home. Adjustable for various walls from 6" minimum to any thickness. Two sets of rods are sent with each unit, the short ones for walls up to 8" thickness, the long ones for walls up to 12". Longer bolts furnished without extra charge when thickness is specified. Motor does not interfere with radio. Extension rods for operating the units furnished without extra charge for installations of unusual height. Opening in wall for box and telescopic sleeve should be 11 1/4" square. Note the finish is buff enamel or of stainless steel. Designate which by using the proper code word. Available only for 110 volts, 60 cycles and 25 cycles, single phase, alternating current.



Buffalo Built-In Type  
12" Home Ventilating Unit

The 12" Built-in Wall Box is for the larger homes. It is supplied in buff enamel finish. Stocked for direct current and 110 volts, 60 cycle or 25 cycle, single phase, alternating current. Use correct code word to indicate which is wanted. Code words cover 1150 revolutions. If 750 speed motors are wanted add word SLOW to the code.

Add 220 volts to code if that voltage is available. The 220 volt motors can be furnished for only 1150 revolutions.

## Breezo Cooling Fans

## Circular No. 2977

Code Word	Description	Price
BEJUZ	18" Single Speed, 110 volt, 60 cycle, 1150 R.P.M.	\$65.80
BEKAR	18" Two Speed, 110 volt, 60 cycle, 1150 and 1750 R.P.M.	74.90

## "Breez-Air" Attic Fans

## Circular No. 3018

Size	Net Prices and Code Word			H.P. of Motor	Motor Speed	Fan Speed	Watts Input	Net Weight	Shipping Weight	Capacity Ft. per M.
	110 V. 60 Cy. 1 Phase	220 V. 60 Cy. 1 Phase	Dir. Cur.* and 3 Ph. 60 Cy. A.C.							
30"	\$54.00 BEOSN	\$56.00 BEOMJ	\$66.00* BEOHD	1/6	1725	490	235	81	120	5,000
36"	68.00 BEORM	70.00 BEOLH	82.00* BEOGE	1/4	1725	400	315	106	140	7,500
42"	88.00 BEOPL	90.00 BEOKG	102.00* BEOFB	1/3	1725	320	350	140	175	10,000
48"	130.00 BEONK	130.00 BEOIF	130.00* BEODZ	1/2	1725	270	450	200	225	13,000

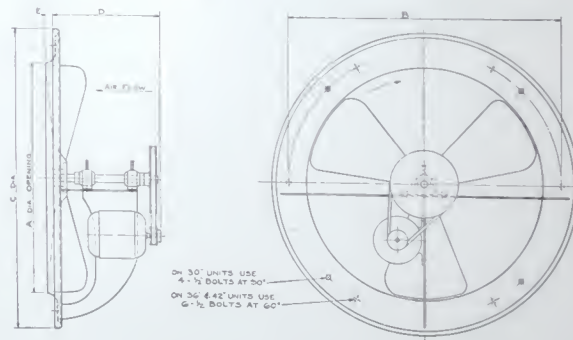
\*NOTE—Prefix letter "D" when direct current motor is wanted.

## DIMENSIONS

Size	A	B
30"	30 $\frac{3}{4}$	35 $\frac{1}{2}$
36"	37	42
42"	43	45 $\frac{1}{4}$
48"	49	52 $\frac{1}{4}$

Size	C	D	E
30"	40	15	1
36"	47	16	$\frac{7}{8}$
42"	47	18 $\frac{3}{4}$	1 $\frac{3}{4}$
48"	54	22	2



## "Breez-Air" Accessories

## STEEL INLET BOXES

Steel Inlet Boxes are priced herewith. However these are bulky to ship, cannot be knocked down and are more expensive than wood or fibre. Most boxes consist of a wooden frame of the dimensions shown in sketch on page 7 of this price sheet and are covered with fibre or Celotex. Such boxes are more quiet and can be made right in the attic of the home.

Size	30"	36"	42"	48"
Price	\$40.00	\$50.00	\$60.00	\$75.00
Code Word	BEOCY	BENUZ	BENOV	BENIX

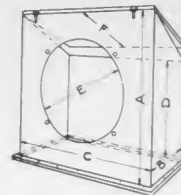


Steel Inlet Box



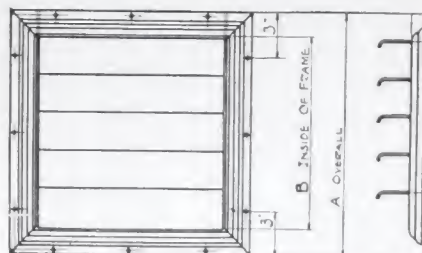
## Dimensions—Steel Inlet Boxes

Size	A	B	C	D	E	F
30"	46 $\frac{1}{4}$ "	24 $\frac{1}{4}$ "	46 "	33"	33"	27 $\frac{5}{8}$ "
36"	48 $\frac{1}{2}$ "	34 "	48 $\frac{1}{4}$ "	29"	39"	39 $\frac{1}{8}$ "
42"	52 "	46 "	48 $\frac{1}{4}$ "	26"	44"	52 $\frac{7}{8}$ "
48"	58 "	56 "	56 "	28"	52"	64" App.

B, C & F  
are Inside  
Dimensions

## AUTOMATIC LOUVERS

Automatic Louvers are sometimes used when the "Breez-Air" Fan is installed in the wall or window of the attic (see dimensions). Fixed wooden louvers acting similar to a hinged door or window may also be used.



Dimensions apply to all sides of shutter

Size	30"	36"	42"	48"
Price	\$23.80	\$29.40	\$35.00	\$42.00
Code Word	BABUB	BABSA	BENAV	BEMUY

Size	30"	36"	42"	48"
A	37 $\frac{5}{8}$ "	43 $\frac{7}{8}$ "	50"	56"
B	31 $\frac{1}{2}$ "	37 $\frac{3}{4}$ "	44"	50"
Ship. Wgt., lbs.	60	70	110	150

## WIRE GUARDS

Wire Guards on the fan side are sometimes used when the "Breez-Air" Fan is installed in an inlet box, discharging into the attic.

Size	30"	36"	42"	48"
Price	\$7.00	\$10.64	\$14.00	\$20.00
Code Word	BEMOY	BEMEV	BEMAT	BELUX

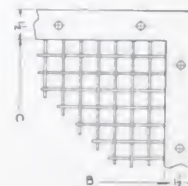
## CEILING GRILLS

Ceiling Grills are made of  $\frac{1}{4}$ " cold rolled, flat steel wire,  $1\frac{1}{2}$ " mesh. Frames are  $1\frac{1}{2}$ " by  $\frac{1}{8}$ " steel with screw holes. See sketch showing dimensions. Note grills have openings same size as floor dimensions of inlet boxes.

Size	30"	36"	42"	48"
Price	\$10.00	\$12.50	\$15.00	\$18.00
Code Word	BELOW	BELIV	BELET	BELAS

Size	30"	36"	42"	48"
B	24 $\frac{1}{4}$ "	34 "	46 "	56"
C	46 "	48 $\frac{1}{2}$ "	48 $\frac{1}{2}$ "	56"



## SHEAVE PULLEYS

Sheave Pulleys having variable pitch diameters can be supplied which give about 30% speed reduction. These may be used where the house is small, to reduce the capacity and power required.

30"	\$4.00	BEKUK	42"	\$4.50	BEKIT
36"	\$4.00	BEKOV	48"	\$5.00	BEKES

## Electric Blowers

## Bulletin No. 2386-A

No.	Description	Price	Code	No.	Description	Price	Code
2E	Variable speed Electric Blower	\$37.50	ABITC	2EH	Variable speed Electric Blower	\$48.50	ABIZJ
2E	Constant speed Electric Blower	37.50	ABIVD	2EH	Constant speed Electric Blower	48.50	ABJAK
2E	Constant speed Electric Blower (32 Volts)	45.00	ABIXG	3E	Constant speed Electric Blower	60.00	ABJEL
				4E	Constant speed Electric Blower	88.00	ABJIM



## Baby Conoidal Fans

## Bulletin No. 475-D

## NIAGARA WHEEL

No.	R.P.M.	Single Phase 60 Cycle	2 & 3 Phase 60 Cycle	Direct Current	No.	R.P.M.	Single Phase 50 Cycle	2 & 3 Phase 60 Cycle	Direct Current
1	1750	\$31.50 ALABM		\$42.00 ALACN	3 1/2	1750	\$140.00 ALANZ	\$122.50 ALAPB	\$203.00 ALARC
2	1750	35.00 ALADP		49.00 ALAFR	3 1/2	1440	115.50 †ALASD	122.50 †ALATF	.....
3	1750	49.00 ALAGS	\$60.20 ALAHT	60.20 ALAJV	2 1/2	1150	101.50 ALAVG	105.00 ALAWH	105.00 ALAXJ
3	1150	50.40 ALAKW	63.00 ALALX	63.00 ALAMY	3 1/2	870	98.00 ALAYK	105.00 ALAZL	105.00 ALBAH
DUPLIX WHEEL									
3 1/2	1750	\$68.60 ALBIK	\$84.00 ALBOL	\$84.00 ALBUM	3 1/2	1150	\$73.50 ALCIL	\$84.00 ALCOM	\$87.50 ALCUN
3 1/2	1440	77.00 †ALCAJ	94.50 †ALCEK	.....	†—25 cycle motor.				

## Buffalo Volume Fans

## Bulletin No. 2507-D

No.	Description	Price	Code	No.	Description	Price	Code
21	Volume Fan .....	\$ 36.00	ACGEM	25	Volume Fan .....	\$93.00	ACHAM
22	Volume Fan .....	48.00	ACGIM	26	Volume Fan .....	148.50	ACHEN
23	Volume Fan .....	58.50	ACGOP	27	Volume Fan .....	215.00	ACHIP
24	Volume Fan .....	74.25	ACGUR				

## Steel Pressure Blowers

## Catalog No. 410-E

No.	Description	Price	Code	No.	Description	Price	Code
1	Steel Pressure Blower ....	\$ 18.00	ACHUS	8	Steel Pressure Blower ....	\$140.00	ACISF
2	Steel Pressure Blower ....	26.00	ACICP	9	Steel Pressure Blower ....	171.00	ACIVH
3	Steel Pressure Blower ....	42.00	ACIDR	10	Steel Pressure Blower ....	228.00	ACIXK
4	Steel Pressure Blower ....	55.00	ACIGT	11	Steel Pressure Blower ....	366.00	ACJAN
5	Steel Pressure Blower ....	68.00	ACILY	11 1/2	Steel Pressure Blower ....	474.00	ACJEP
6	Steel Pressure Blower ....	84.00	ACIMZ	12	Steel Pressure Blower ....	492.00	ACJIR
7	Steel Pressure Blower ....	100.00	ACINB				

NOTE: For discharge other than bottom horizontal discharge add 10%.

## Standard Mill Exhausters

No.	Description	Price	Code	No.	Description	Price	Code
25"	Single Mill Exhauster .....	\$ 81.00	ACJOS	30"	Double Mill Exhauster .....	\$164.00	ACLES
30"	Single Mill Exhauster .....	94.00	ACJUT	35"	Double Mill Exhauster .....	197.00	ACLIT
35"	Single Mill Exhauster .....	113.00	ACKAP	40"	Double Mill Exhauster .....	262.00	ACLOV
40"	Single Mill Exhauster .....	150.00	ACKER	45"	Double Mill Exhauster .....	327.00	ACLUW
45"	Single Mill Exhauster .....	188.00	ACKIS	50"	Double Mill Exhauster .....	396.00	ACMAS
50"	Single Mill Exhauster .....	226.00	ACKOT	55"	Double Mill Exhauster .....	465.00	ACMET
55"	Single Mill Exhauster .....	265.00	ACKUV	60"	Double Mill Exhauster .....	576.00	ACMIV
60"	Single Mill Exhauster .....	330.00	ACLAR				

Single &amp; Double Slow Speed High Efficiency Mill Exhausters. Prices on application.

## "HVA" Blower Fans

For Furnaces, Air Conditioning and Drying

## Bulletin No. 2947-A

Size No.	Whele Dia.	No. Fan Units	Style "A" Fan Price	Size No.	Whele Dia.	No. Fan Units	Style "A" Fan Price
121	12"	1	\$20.40	152	15"	2	
151	15"	1	28.80	182	18"	2	\$49.20
181	18"	1	43.20	212	21"	2	81.00
211	21"	1	57.00				108.00
122	12"	2	33.60	123	12"	3	50.40
				153	15"	3	74.40

## "HVA" Blower Fans Complete with Motor and V-Belt

## Bulletin No. 3044

Size No.	Wheel Dia.	No. Fan Units	Style "A" Fan Price
121	12"	1	\$42.60
151	15"	1	51.00



for Better Ventilation

**CERTIFIED  
RATINGS**

Air deliveries are in accordance  
with Standard Test Code for  
Centrifugal and Propeller Fans  
adopted jointly by the National  
Association of Fan Manufacturers  
and American Society of  
Heating & Ventilating Engineers

MEMBER OF  
**NAFM**

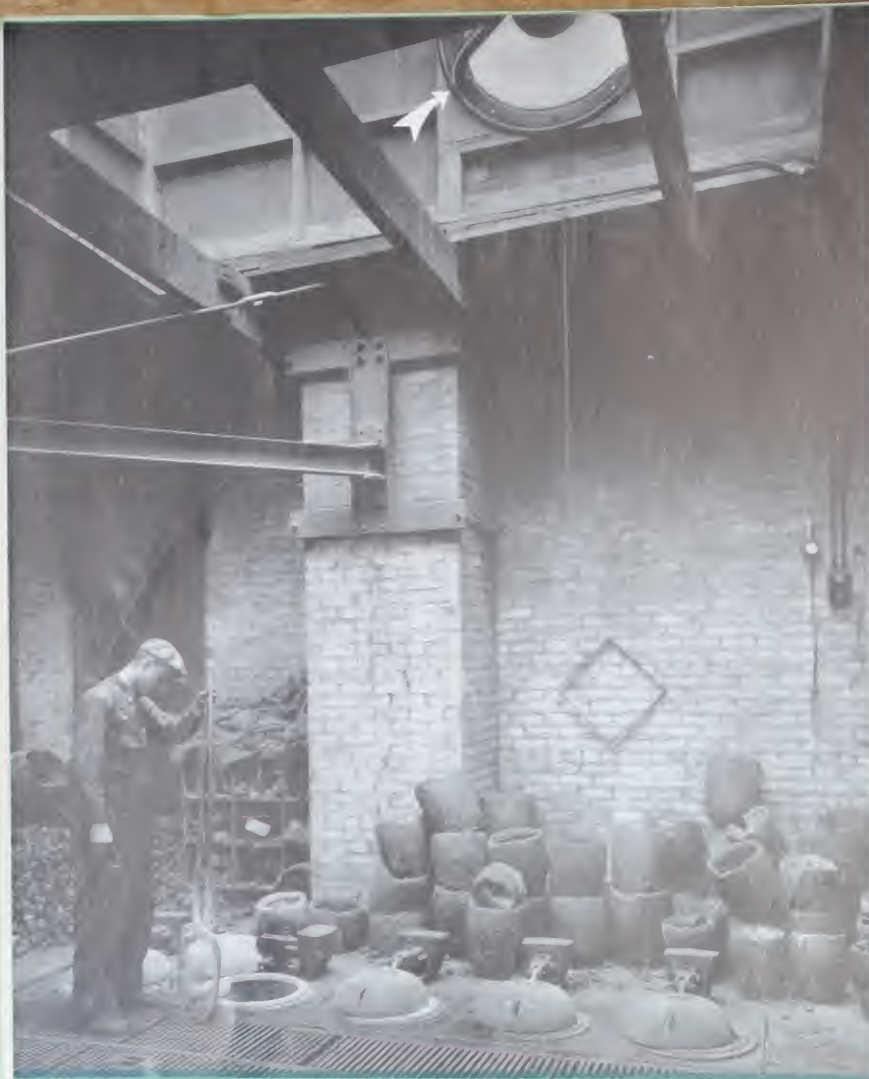


*Buffalo*  
*Breezo*  
**FANS**

Bulletin  
2321-K

A.I.A. No. 30d1





## Better Ventilation, a Modern Necessity

### ● Industrial Plants . . .

*In this brass foundry a "BREEZO" Fan draws off fumes from the melting furnaces. In hundreds of other industrial applications "BREEZO" Fans prove of equal value in providing Fresh Air for employees' welfare.*

**B**BETTER VENTILATION means not only the removal of stale and odorous air, and the supplying of fresh air . . . it also means fans that are quiet and trouble-free. When BREEZO Fans are installed, satisfactory operation is assured if the following table of air changes is adopted:

#### Recommended Air Changes

In	Air Change Every
Residence Kitchens . . . . .	2 minutes
Garages . . . . .	5 to 7 minutes
Bowling Alleys . . . . .	5 to 8 minutes
Stores . . . . .	5 to 8 minutes

In	Air Change Every
Bakeries . . . . .	2 to 4 minutes
Laundries . . . . .	3 to 5 minutes
Billiard Rooms . . . . .	6 to 8 minutes
Cigar Stores . . . . .	5 to 8 minutes
Creameries . . . . .	5 to 10 minutes
Cleaning-Pressing Shops . . . . .	3 to 5 minutes
Clubs . . . . .	5 to 7 minutes
Restaurant Kitchens . . . . .	2 to 3 minutes
Theatres . . . . .	5 to 10 minutes
Printing Shops . . . . .	5 to 10 minutes
Laboratories . . . . .	5 to 10 minutes
Factories . . . . .	5 to 10 minutes

*Additional Information On Request, No Obligation.*

FOR BETTER VENTILATION . . . BUFFALO BREEZO FANS



## Breezo Fans provide Better Ventilation at a very Low Cost

**B**ECAUSE disk and propeller fans are usually installed where people congregate or work, any appreciable noise which results from fan operation is objectionable.

BREEZO all-steel construction, with its stream-lining of surfaces over which the air flows, and proper operating speeds for various size fans combine to produce a ventilating fan which is not only highly efficient, but also **EXTREMELY QUIET**.

Compare the following points of superiority with the construction of any other fan on the market:

- 1—Due to improved blade design and setting these fans deliver the maximum amount of air directly forward and with no stray streams thrown off at a tangent. Velocity at the center is approximately the same as at tip.
- 2—STREAM-LINE design and construction of the pressed steel ring permits the air to enter the wheel without frictional loss or eddy currents.
- 3—BEARINGS are of extra large dimensions, bronze bushed (the shafts are nickel steel) while the wheel is placed close to the motor bearing, giving minimum overhang with resulting increased life of the bearing.
- 4—LUBRICATION of bearings (of waste-packed type) is such that each fan so equipped will run 1500 hours without re-oiling, under normal conditions.
- 5—BAND and RING are locked and spot-welded to the arms which are very strong and of graceful design.
- 6—HUBS are of machined steel locked securely to the wheel.
- 7—NO BOLTS are used in the assembly of the ring and arms, nothing to work loose.
- 8—PRESSED, cold rolled steel plate construction, die-formed to accurate dimensions, assures perfect uniformity and balance. Much stronger and lighter than castings and without surface scale so the enamel enters the pores of the metal, giving a smoother finish. No loss by breakage in shipment.
- 9—WEIGHT far less than fans made of cast iron, even lighter than aluminum and far stronger. Can be shipped by express at no more cost than the ordinary fan when shipped by freight.
- 10—MOTORS of totally enclosed type to keep out dirt and water. Large enough to carry the load continuously without depending on any artificial ventilation which is unreliable and which carries both dirt and moisture into motor windings. Made especially for these fans. Very quiet in operation.



FOR BETTER VENTILATION . . . BUFFALO BREEZO FANS





● Cocktail Lounges, Grills . . .

*With modern, light, clean and attractive cocktail lounges goes the demand for good ventilation—Fresh Air! "BREEZO" Fans are ideal for this service because they are easily installed, good looking, and very quiet in operation. Their cost is relatively low.*

## Installation Tips

*Read Carefully!*

**T**HE following paragraphs give important information about installing Ventilating Fans for most effective ventilation.

Proper fans provide the most effective means of room ventilation. They are mounted in side walls or upper window spaces, set in wood or steel frames, or in transoms

over doors or windows. They can be mounted with vertical shafts to discharge through flues, and a very desirable arrangement consists of a galvanized steel penthouse complete with motor driven fan, automatic back draft louver shutter, and hinged rain-proof cover—see illustration on page 13. Breezo fans should be used only with caution if any ducts are necessary. The resistance caused by ducts tends to cut down the air quantity unless the ducts are short and at least as large thruout the entire length as the fan itself.

FOR BETTER VENTILATION . . . BUFFALO BREEZO FANS





*Garage and paint shop ventilation, required by law in most states, is necessary for the health and safety of employees and patrons. Because state laws vary, it is important that you get legally approved methods of installation, before installing a "BREEZO" Fan.*

**Garages, Paint Shops . . .**

### Proper Air Change

The proper size of Breezo fan for ventilating a room is usually arrived at by the basis of air change, meaning the number of minutes in which the fan will deliver an amount of air equal to the total cubic contents of the room. Thus a room 15' x 40' x 10' high contains 6,000 cubic feet, and a two-minute air change would require a Breezo fan handling 3,000 cfm. For a four-minute air change a 1,500 cubic foot fan is required. A table giving the air

changes recommended is shown on page 2.

### Location of Fan

When steam, fumes, or odors coming from some particular source are to be removed, locate the ventilating fan as near to the source as is practical, with fresh air inlet on opposite side of the room. When this is done the smoke, odors, etc., will not be drawn across the room or have a chance to penetrate to other parts before being exhausted. This applies particularly to kitchens, laundries, and to industrial pro-

**FOR BETTER VENTILATION . . . BUFFALO BREEZO FANS**





**Lunch  
Rooms  
and  
Cafeterias . .**

*Food odors spoil customers' appetites, so the smart lunch room operator is easily convinced that quiet "BREEZO" ventilation is a good investment. Fans are usually located at the back of the room, drawing fresh air from the front of the building. Fan is not visible in this picture, being located back of the grill marked by arrow.*

cesses where kettles, crucibles, or ovens, etc., are used.

When the ventilation is more general, as in restaurants, or smoking rooms, the fan or fans should be located so as to sweep the entire room. If the room is long and narrow, a fan at one end will give the best results, providing that the only fresh air opening is near the opposite end of the room. It is important in general room ventilation that the fan or fans should be placed so that the path of the fresh air

entering the room may be such as to sweep the entire room as uniformly as possible so as to have some circulation at all points, and no dead spaces. It is better to place the fan so that the air will be removed from whatever part of the room has the most objectionable concentration of smoke, fumes, or heat.

A large square room may be well ventilated by an opening in the ceiling connecting with an exhaust fan mounted in a penthouse. One or more such fans in pent-

**FOR BETTER VENTILATION . . . BUFFALO BREEZO FANS**





*Hot weather makes a ventilating fan an absolute necessity in the modern tonsorial parlor—and because “BREEZO” Fans are quiet, large capacity units they are ideal for this service. Fans should be installed near ceiling, with an air change every 5 to 10 minutes recommended.*

Barber  
Shops,  
Beauty  
Parlors . . .

houses can be used, with fresh air entering around the sides of the room. Instructions cannot be given in too much detail, but the general scheme should be borne in mind that objectionable odors, etc., should be removed as near the source as possible, and that the path of the air through the room should be such as to traverse the entire space and produce a regular movement toward the exhaust fan.

Do not install the fan where it can short-circuit the ventilation by having the fresh

air inlet close to the exhaust fan. Wherever practical locate the fan at the opposite side of the room from the door or window through which fresh air may enter. Always keep windows or doors near the fan closed. This is necessary in order that the fan be of the greatest possible benefit.

#### Prevailing Winds

Advantage should be taken of the assistance which the prevailing wind will give. It is bad engineering to use an exhaust fan

FOR BETTER VENTILATION . . . BUFFALO BREEZO FANS





● Modern  
Laundries ...

*Steam, heat and laundry odors combine to make "BREEZO" ventilation a good investment in any laundry. In this fine modern laundry "BREEZO" Fans draw off the overheated, humid air, replacing it with fresh outdoor air. Employees feel better, work better. Costs are lower. A 3 to 5 minute air change is about right on jobs of this nature.*

discharging air through a wall against which the prevailing winds strike.

When exhaust fans discharge into a flue or into a closed court, the wind pressure need not be considered.

**Use with Ducts**

We do not recommend propeller fans for moving air through a long duct system, as this type of fan is not intended to produce the pressure which that kind of work requires. If ducts are short and are at least as large in cross sectional area as the fan

used, the reduction in the amount of air handled by the fan will usually not be serious. However, it must be borne in mind that a propeller fan discharging against resistance requires more power and handles less air. If the resistance is high enough, it may be possible to overload the motor, although Breezo fans are powered with motors of ample size for operation under any conditions approaching free delivery.

**High Temperatures**

Do not install Breezo fans where the temperature is excessive, as directly over

FOR BETTER VENTILATION . . . BUFFALO BREEZO FANS





*Stale, smoke-filled air never helps bowlers to roll a 300-game and proprietors of bowling alleys, billiard rooms, and other amusement places are quick to see the advantages of quiet "BREEZO" ventilation, which quickly pays for its cost by increased patronage. We recommend an air change of from 6 to 10 minutes for this type of installation.*

### Bowling Alleys...

furnaces or heaters. Breezo motors are of the highest quality, fully enclosed and self-ventilating, i.e., they do not require any air to be drawn through them for purposes of ventilation.

Generally speaking the motors should not be installed where they would be exposed to a temperature of more than 115°F. For higher temperatures a housed type fan where the motor is not in the path of the air is recommended.

### Use with Hoods

When Breezo fans are used for exhausting from hoods over ranges, vats, plating tanks, etc., best results will be obtained if the hoods are dropped as low as practical without interfering with the work. If two or more sides can be closed in, this will prevent cross currents from interfering with the suction through the hood.

Where metal hoods are considered too expensive, canvas curtains may in some

**FOR BETTER VENTILATION . . . BUFFALO BREEZO FANS**





#### Modern Offices . .

*In this well-kept office good air is provided by "BREEZO" Fans installed in the back wall. Operating silently, they carry off the stale air which destroys employee efficiency—circulating in its stead, vitally essential fresh air. For this type of installation an air change every 5 to 8 minutes is recommended.*

cases be used for the same purpose. Wood or metal partitions are also used to enclose spray booths and for confining fumes, dust, etc., in other industrial processes so as to make the action of the fan more positive.

#### Use in Garages

Breezo fans are often installed in garages to carry away deadly carbon monoxide gas and remove other objectionable features of running motors in a closed space. Monoxide gas is one of the most deadly poisons, especially dangerous be-

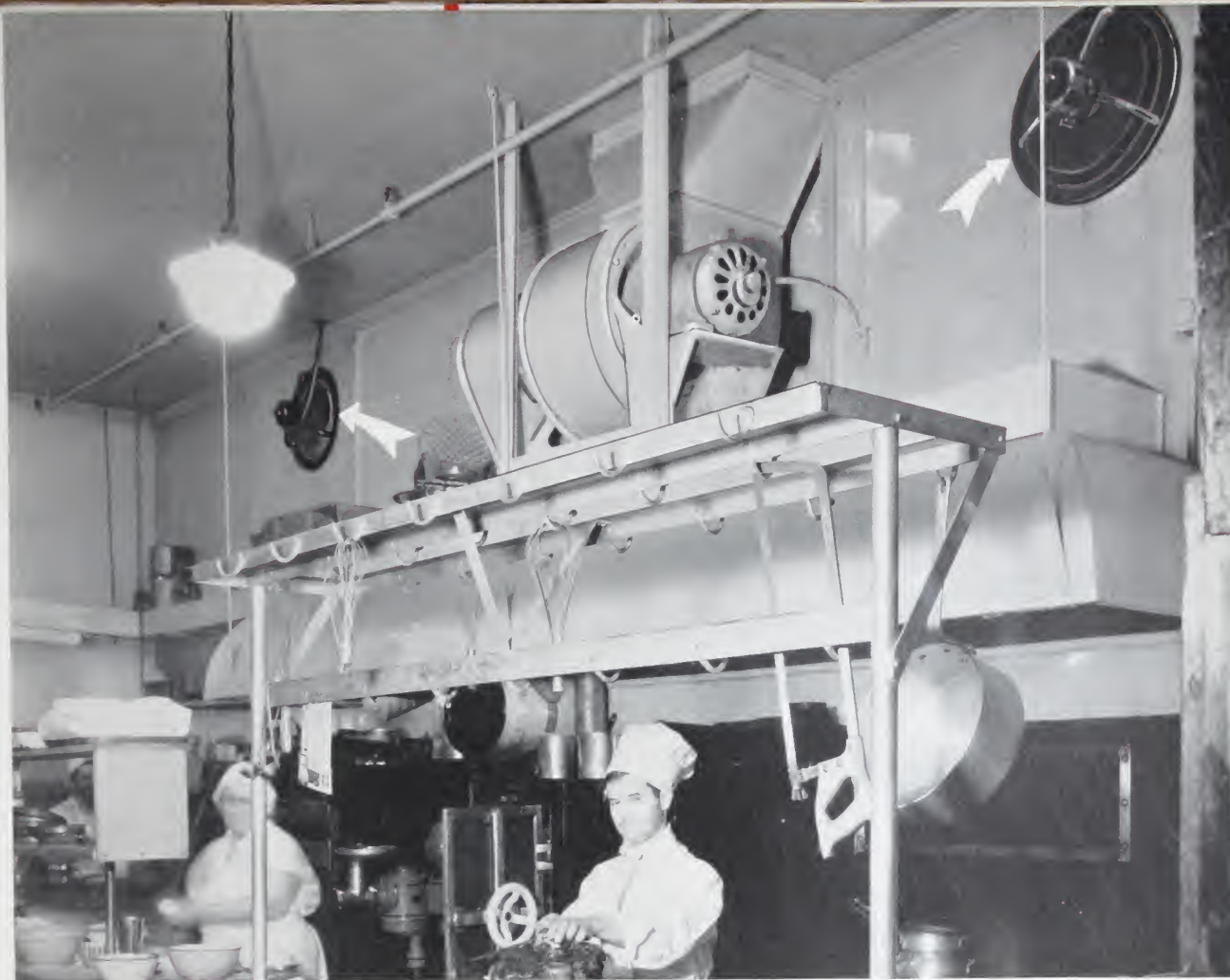
cause it is odorless and its presence cannot be distinguished by the senses. Carbon monoxide is heavier than air, so exhaust fans should be located close to the floor and on the side where the motors are usually running. Fans may also be mounted above and exhaust through ducts extending down within a foot or so of the floor.

#### Supply Air

Breezo fans may be used for blowing into a building, and will be equally effective as far as the capacity is concerned, but

FOR BETTER VENTILATION . . . BUFFALO BREEZO FANS





*This clean, restaurant kitchen is kept comfortable with three fans—a Buffalo Limit-Load Exhauster drawing odors into a hood over the range and two quiet "BREEZO" Fans which remove heated air from the dining room and kitchen, drawing air in at the front of the restaurant. A kitchen air change of 2 to 3 minutes is desirable here.*

Restaurant  
Kitchens . .

the uses for such an application are limited and there are numerous objections, such as the introduction of any dust in the outside air and the creation of drafts. Air blown into a room by a propeller fan will cause much more objectionable drafts than the same volume taken out by an exhaust fan. It is occasionally desirable to install a Breezo fan for supplying air for ventilating basements, the air in this case finding its way out through elevator shafts and stairways, and being of some assistance for cooling other rooms in summer.

#### Kitchen Ventilation

The 8" or 12" fan is recommended for the residence kitchen, depending on the size of room. Here, as with other applications, it is desirable to place the fan as close to the range as possible, either on the same or adjacent side of the room, although the capacity of the fan is such that satisfactory ventilation in the ordinary kitchen will be had if the fan is located on the side opposite the range.

FOR BETTER VENTILATION . . . BUFFALO BREEZO FANS

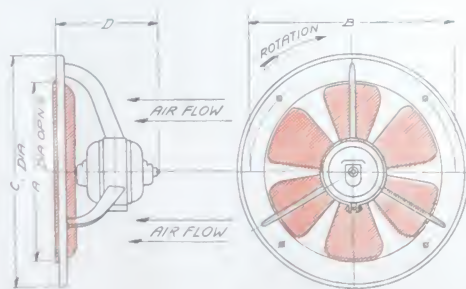


# Specifications

## CAPACITIES AND DETAILS of Standard A. C. and D. C. Units

Size In.	Speed R.P.M.	Cap. Cu. Ft.	Decible Rating	Weight, Lbs. Net Ship.	
8	1500	500	30.0	5	6
12	750	460	28.0	18	19
12	1150	700	35.7	18	19
12	1725	1060	47.6	18	19
16	850	1100	37.6	36	38
16	1150	1500	44.6	36	38
18	850	1800	42.6	44	52
18	1150	2400	49.0	44	52
24	670	3200	44.6	85	107
24	850	4000	48.5	85	107
30	670	6200	56.6	165	174
36	575	10000	56.0	220	270

### Prices on Application



Size	A	B	C	D
8	8 3/4	9 1/2	10 1/4	3 1/2
12	12 1/2	14 1/8	15 1/2	6 1/8
16	16 1/2	19 1/2	22	9 1/8
18	18 3/4	21 1/2	24	9 1/8
24	25	28 1/2	32	14 1/8
30 AC-DC	31	35 1/2	40	18 3/8
36 AC-DC	37	42	47	18 3/8

### Variable Speed A. C. Single Phase Motors

There is an increasing demand for variable speed fans for operation on alternating current and we can furnish capacitor type motors and three speed controls on the complete line. Where quiet operation is essential, it is advisable to use the variable speed unit, this also permitting the capacity of the fan to be reduced when desired, as in extremely cold weather.

## Buffalo Breezo Fans with Capacitor Motors and Variable Speed Controls



Fan with Capacitor Motor  
and 3-Speed Regulator

Size	Synchronous Speed		Weight, Lbs.	
			Net	Ship.
12"	1200	Maximum Speed 90%	18	34
16"	1200	Medium Speed 75% and	36	58
18"	1200		44	80
24"	900	Minimum Speed 60%	85	131
30"	720		165	207
36"	600	of Synchronous Speed	220	300

Interchangeable for 110 volt or 220 volt (60 cy. 1 ph. only)

### Brass Wheels

When Breezo Fans are to be installed for use with paint spray equipment, it is important to use a brass wheel, which prevents any possibility of sparking due to the wheel striking the tripod arms or ring. These wheels are made in three sizes—16", 18" and 24"—and can be shipped from stock.

### Vertical Motors

Ball bearing vertical motors can be furnished for all sizes with the exception of the 8" at slight extra cost. 110 volt, 60 cycle single phase 1150 R.P.M. motors are carried in stock for 12", 16" and 18" fans. Shipment 4 weeks after receipt of order on other sizes.

### Regulators for D. C. Motors

When ordering regulator, be sure to specify whether it is to be used for 110 or 220 volt.



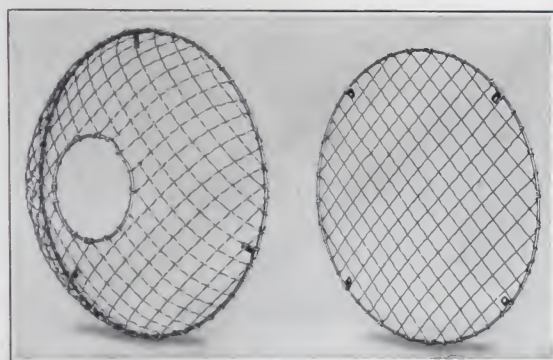
FOR BETTER VENTILATION . . .

BUFFALO BREEZO FANS



# Accessories

## WIRE GUARDS For Fans Within Reaching Distance From Floor



Motor Side

Wheel Side

We recommend the use of wire guards on fans installed within reaching distance from the floor.

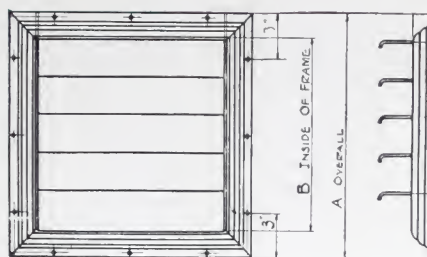
These guards are strong and durable and can be attached before or after fans have been installed. Available to fit all sizes from 12" to 36".

When fan is installed in window it is advisable to provide a wooden frame of the proper size with a circular hole to fit ring of the "BREEZO" Fan. If extreme quietness is desired, put a strip of felt between the ring and the wooden panel, and felt washers under the heads of the bolts. This forms a cushioning effect and tends to deaden any slight hum.

## BUFFALO AUTOMATIC LOUVERS



These louver dampers designed and patented for use with BUFFALO "BREEZO" Fans, are made up on a new principle, and each individual louver stands out perfectly straight when the fan is in operation. They remain tightly closed when the fan is stopped. The louvers are made of aluminum and hung on brass pins to prevent corrosion.

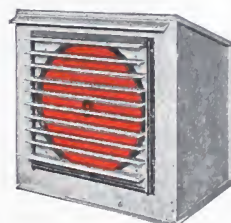


Dimensions apply to all sizes of the shutter

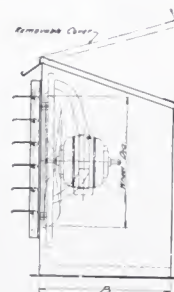
## Louver Dimensions and Weights

Size	12	16	18	24	30	36
A .....	16 7/8	20 1/8	23 1/4	31 3/8	37 5/8	43 7/8
B .....	12 3/4	16	19	25 1/4	31 1/2	37 3/4
Shipping Wgt. Lbs.	8	20	26	48	60	70

## BUFFALO PENTHOUSES



Buffalo Penthouses are for use when it is desirable to place the fan on the roof and exhaust air from the room thru a vertical shaft or opening in the ceiling. Made of heavy galvanized steel, with a removable top, arranged with hasp for locking. Shipped set up, ready for installation.



## Penthouse Dimensions and Weights

Wheel Dia.	12	16	18	24	30	36
Width overall	20	24	26	34	42	48
B	12	16	18	24	30	36
Height overall	24	30	32	38	44	50

Size	Approx. Shpg. Wgt.
12 inches .....	50 pounds
16 inches .....	64 pounds
18 inches .....	75 pounds
24 inches .....	150 pounds
30 inches .....	225 pounds
36 inches .....	300 pounds

FOR BETTER VENTILATION . . . BUFFALO BREEZO FANS



# Breezo Cooling Fans

*Keeping Cool is Made Easy  
with these Light Weight Fans*

Hundreds of prospects for Breezo Cooling Fans are ready to be sold in every large city! These include owners of restaurants, cafes, beer-gardens, billiard rooms, small theatres, dance halls, department stores, drug stores, soda fountains, in fact—owners of every kind of establishment where people congregate.

Developed from an earlier line of Breezo Coolers, the new stream-line, adjustable, two-speed Breezo Cooling Fan is an enormous improvement in every respect.

Starting with the fan proper, this is an improved three-blade high-efficiency design which handles a maximum amount of air with very little noise. A two-speed motor provides a desirable capacity range. Attractive aluminum finished wire guard is provided, as shown.

A special tilting device of original design permits the user to circulate the air in the upper part of the room, or to direct a blast downward to reach an opposite corner.

Base of the fan is cast iron, large enough to prevent tipping yet light enough to facilitate moving. Fan and pedestal can be revolved on this base, so that blast may be directed anywhere in the room.

With Breezo Cooling Fans, air circulation in the room is assured. Circulation means the effect of cooling, thus patrons appreciate these fans.



Full view of the new adjustable Breezo Cooling Fan, blast horizontal. Note coat hangers located at switch.



Close-up, showing fan tilted to blow slightly downward. Head is adjusted by turning thumb-wheel located at back of switch. Fan is rotated by turning pedestal in the cast iron base.



## SPECIFICATIONS Breezo Cooling Fans

### Two-Speed Units

Size	Speed-R.P.M.	Capacity-C.F.M.	Weight, Lbs.
18"	1750-1150	3300-2200	225

### Single Speed Units

18"	1150 or 1750	2200 or 3300	225
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Ask for Bulletin 2977, covering full details and prices

FOR BETTER VENTILATION

BUFFALO

BREEZO

FANS



## Hundreds of Applications



*Muggy days hold no terrors for the amusement or service place equipped with Breezo Cooling Fans.*



*Breezo Cooling Fans provide constant air motion in this large dining room in hot weather.*

FOR BETTER VENTILATION . . . BUFFALO BREEZO FANS



## Buffalo Baby Conoidal Ventilating Sets



No. 1



No. 2



No. 3



No. 3 1/2 Baby Conoidal with Adjustable Base

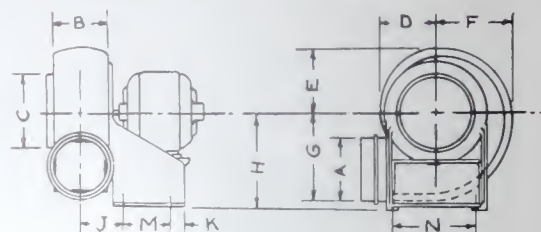
THESE fans have cast iron housings, and are reversible for different positions of discharge. They are used principally for exhausting from hoods and vats holding gases, moisture, steam, smoke, vapor, foul air, odors, heat fumes and dust from various types of buildings, as well as for ventilating toilet rooms in public buildings and schools, and they are also used in connection with oil burning equipment where mechanical means of atomization are used. All sizes, with the exception of No. 3 1/2 are carried in stock at all times. The latter, however, can be shipped promptly. Motors are supplied for 110 and 220 volts direct current, and the same voltages, 25 and 60 cycle, single phase,

alternating current, in addition to poly-phase for sizes 3 and 3 1/2. Table below shows the normal rating of these fans.

The position of discharge may easily be changed to any desired within a few minutes' time. Sizes 2 and 3 available in either direction of rotation.

For additional information and details, refer to Bulletin 475-D.

### DIMENSIONS — BUFFALO BABY CONOIDAL VENTILATING SETS



#### Dimensions in Inches

Size	A	B	C	D	E	F
1	3	2 7/8	4	3	3 7/8	3 7/8
2	4	3 7/8	5 1/2	3 3/4	4 3/4	4 3/4
3	7 1/2	5 3/8	7 1/8	4 1/8	5 3/4	7 1/8
3 1/2	9	7	9 7/8	6 3/8	7 5/8	8 1/8

Size	G	H	J	K	M	N
1	4 1/8	4 3/4	3 1/8	2	0	7 5/8
2	5 3/4	6 1/4	2 7/8	3/8	4 3/4	8 3/8
3	8 3/4	9 1/4	4 1/8	1/2	7	10 1/2
3 1/2	10 1/8	11 1/2	6	1	7	14

#### Capacities

Fan Size Ningara Wheel	Speed (R.P.M.)	H. P. Motor	Shpg. Weight (Approx.)	Free Delivery c. f. m.	1/2" S.P.
1	1750	1/30	40	98	85
2	1750	1/15	55	206	187
3	1750	1/4	125	950	895
3	1150	1/6	125	625	540
3 1/2	1750	1	300	1900	1840
3 1/2	1440	3/4	300	1560	1495
3 1/2	1150	1/3	300	1245	1155
3 1/2	870	1/6	300	945	825

FOR BETTER VENTILATION

BUFFALO BREEZO FANS



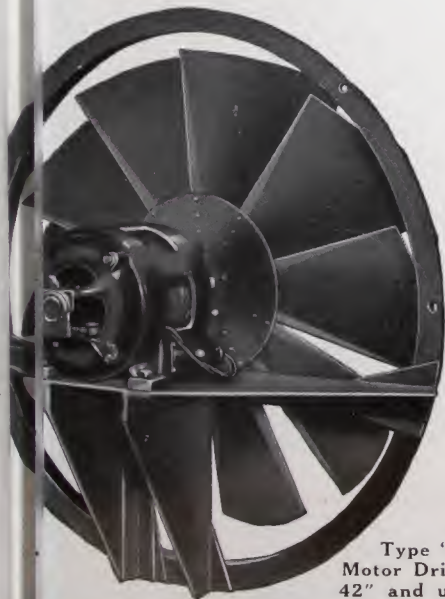
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Pulley Drive—  
Made in five sizes



Type "K"  
Pulley Driven—  
42" and up



Type "K"  
Motor Driven  
42" and up

# BUFFALO BREEZO

## Pulley Driven Fans

Where a large volume of air is to be handled against little or no resistance, the Buffalo Pulley Breezo will be found ideal.

This fan has the multiblade wheel, the same as used on the electric "Breezo" described on the reverse side, but is arranged for pulley drive as shown. The curved blades handle an exceptionally large amount of air.

Heavy duty, dust-proof ball bearings with deep raceway in both inner and outer rings, insure efficient, trouble-free operation.

Pulley Breezos are made in five sizes from 16" to 36". Prices are exceptionally low for fans of this quality.

### SPECIFICATIONS

Size	Normal Speed	Cu. Ft. Air Per. Min.	H.P.	Pulley	Wgt. Lbs.
16 in.	1150	1500	.08	5 x 2 1/4 in.	38
18 in.	1150	2400	.12	5 x 2 1/4 in.	45
24 in.	850	4000	.21	5 x 2 1/4 in.	60
30 in.	670	6200	.34	7 x 3 1/4 in.	110
36 in.	525	8500	.44	7 x 3 1/4 in.	130

### Prices on Application

## Type "K" Disk Fans

Buffalo Type "K" Disk Fans, pulley or motor driven, are made with straight steel blades, tilted at just the right angle to draw air continuously through the wheel without any noise or loss in efficiency.

Heavy, well-riveted blades with sturdy angle iron frame and large bearings, make these fans rigid and suitable for high speed without vibration.

We make type "K" fans in sizes from 42" to 12' in diameter and are able to make quick delivery on all sizes.

### SPECIFICATIONS

Size	Normal Speed	Cu. Ft. Air Per. Min.	H.P.	Pulley	Wgt. Lbs.
42 in.	450	11,200	.50	12 x 3 1/2 in.	250
48 in.	400	15,000	.70	14 x 3 1/2 in.	310
54 in.	350	18,400	.85	16 x 4 1/2 in.	470
60 in.	320	23,400	1.10	18 x 4 1/2 in.	530
72 in.	265	33,500	1.55	20 x 5 1/2 in.	850
84 in.	225	45,000	2.10	24 x 5 1/2 in.	1500

### Larger Sizes and Prices on Application.



# Motor Driven BREEZO FANS

## Look Over These Ten Points of Actual Superiority

- 1—GREATER CAPACITY. Due to improved blade design and setting these fans deliver the maximum amount of air directly forward and with no stray streams thrown off at a tangent. Velocity at the center is approximately the same as at tip.
- 2—STREAM LINE design and construction of the pressed steel ring permits the air to enter the wheel without frictional loss or eddy currents.
- 3—BEARINGS are of extra large dimensions, bronze bushed (the shafts are nickel steel) while the wheel is placed close to the motor bearing, giving minimum overhang with resulting increased life of the bearing.
- 4—LUBRICATION of bearings (of waste-packed type) is such that each fan so equipped will run 1500 hours without re-oiling, under normal conditions.
- 5—BAND and RING are locked and spot-welded to the arms which are very strong and of graceful design.
- 6—HUBS are of machined steel locked securely to the wheel.



Buffalo Breezo Fan With Wire Guard

- 7—NO BOLTS are used in the assembly of the ring and arms, nothing to work loose.
- 8—PRESSED, cold rolled steel plate construction, die-formed to accurate dimensions assures perfect uniformity and balance. Much stronger and lighter than casting and without surface scale so the enamel enters the pores of the metal, giving a smoother finish. No loss by breakage in shipment.
- 9—WEIGHT far less than fans made of cast iron, even lighter than aluminum and far stronger. Can be shipped by express at no more cost than the ordinary fan when shipped by freight.
- 10—MOTORS of totally enclosed type to keep out dirt and water. Large enough to carry the load continuously without depending on any artificial ventilation which is unreliable and which carries both dirt and moisture into motor windings. Made specially for these fans. Very quiet in operation.

### SPECIFICATIONS

Size In.	Speed R.P.M.	Cap. Cu. Ft.	Weight, Lbs. Net	Ship
8	1500	500	5	6
12	750	460	18	25
12	1150	700	18	25
16	850	1100	36	50
16	1150	1500	36	50
18	850	1800	44	60
18	1150	2400	44	60
24	670	3200	85	115
24	850	4000	85	115
30	670	6200	165	220
36	575	10000	220	275

Prices on Application

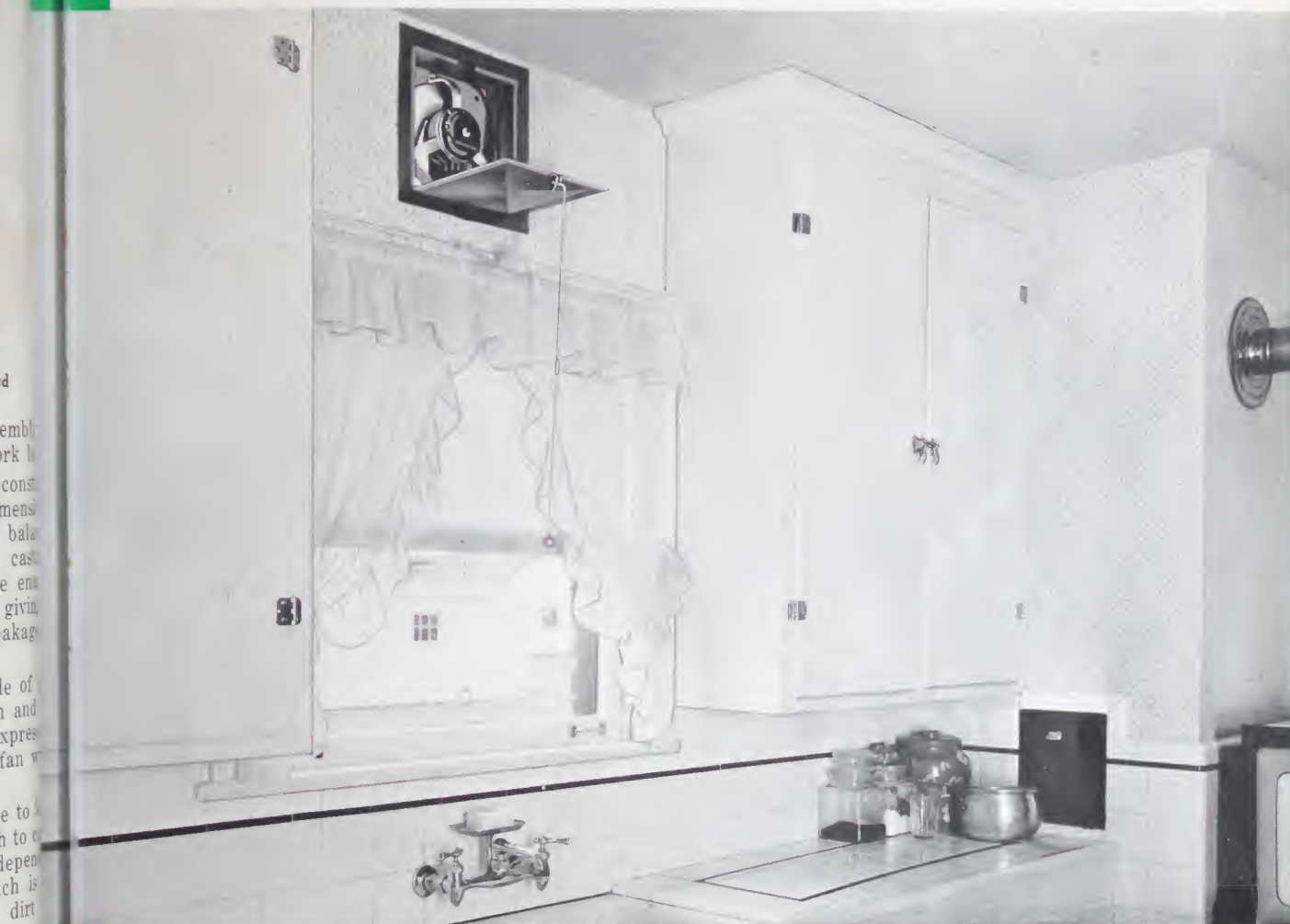
**Buffalo Forge Company**  
Buffalo, N. Y.

In Canada—Canadian Blower & Forge Co., Ltd.,  
Kitchener, Ont.





# ■ Home Ventilation



## ■ is now a necessity!

**T**ODAY we expect comfort and convenience in the home to an extent unthought of a few years back. The Home Ventilating Fan is an accessory which has become a necessity in modern homes. It not only removes annoying and at times nauseating cooking odors, but also carries objectionable, greasy smoke and steam out-of-doors.

This folder illustrates several Buffalo Home Ventilating Fans. Select the one best suited to your requirements and do away with smudgy walls, drapes and furniture, as well as annoying cooking odors.

any

Co., Ltd.

578 6-34



## 8-inch Built-in Unit



The "Buffalo" 8-inch Home Ventilating Units provide ventilation for bungalows, apartments, and kitchenettes.

A slight pull on the enameled rod opens the outside and inside doors to ventilation and starts the motor. A gentle push on the same conveniently located rod stops the motor and closes both the inside and outside doors tightly, giving double protection against air leakage. The possibility of

rattling doors is prevented by suitable springs which at all times hold the doors under tension.

The parts inside the kitchen are furnished in stainless steel or buff enamel. The former harmonizes with monel metal or chromium fittings. The buff enamel may be re-finished after being installed, to match the walls, or color of other kitchen equipment.

The motor is of the most modern design—no switches, brushes or starting mechanism to get out of order or interfere with radio reception.

The "Buffalo" 8-inch Home Ventilating Unit can be installed in the smallest of kitchenettes. Box adjustable to fit any wall with thickness of 6" or more.

Capacity, 500 C.F.M., 1500 R.P.M., 60 Cycle, 110 Volts, Single Phase.

## Specifications 8-inch Unit

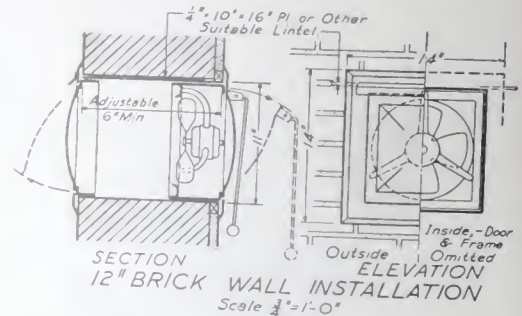
Furnish and install where shown on plans, one Buffalo Home Ventilating Wall Box, complete with 8-inch BREEZO Fan (capacity, 500 cfm.) and direct connected motor, suitable for operating on 110 volt, 60 cycle, single phase current.

The box is to include metal hinged doors on each side of the fan, both controlled by a single rod placed in a convenient position on the inside, the action of which operates an enclosed switch which starts or stops motor.

When closed, the inner door is to conceal all levers as well as the fan and motor, presenting a neat appearance. No parts to project into the room, or beyond the building outside.

Provide opening through wall, 11 1/4" square. Insert telescopic metal sleeve, furnished with box, leaving opening for the Wall Box.

Contractor is to provide a toggle switch at convenient height on wall and concealed wiring in conduit to the switch in the wall box, which is part of the unit.



*The Home Ventilating Unit assures healthful comfort to the occupants of this modern kitchen.*



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## Specifications 12-inch Unit

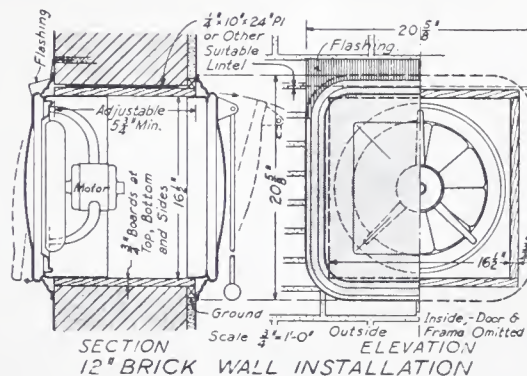
Furnish and install where shown on plans, one Buffalo Home Ventilating Wall Box, complete with 12-inch BREEZO Fan (capacity 700 cfm.) and direct connected motor, enclosed type, suitable for operating on the electric current available.

The box is to include metal hinged doors on each side of the fan, both controlled by a single rod placed in a convenient position on the inside, the action of which operates an enclosed switch which starts or stops the motor.

When closed, the inner door is to conceal all levers, as well as the fan and motor, presenting a neat appearance. No parts to project into the room or beyond the building outside.

Provide opening through wall 18" square. Insert wooden frame made of  $\frac{3}{4}$ " wood, leaving 16 $\frac{1}{2}$ " opening for the Wall Box.

Contractor is to provide a toggle switch at convenient height on wall and concealed wiring in conduit to the switch in the box below, which is part of the unit.



Exterior view of Ventilating Unit installed in a brick wall. Convenient pull rod on inside of building opens or shuts door as necessity requires.



12-inch Buffalo Home Ventilating Unit installed in a new home, illustrating its inconspicuous attractiveness.

## 12-inch Built-in Unit

The Buffalo 12" Home Ventilating Unit is suitable for larger kitchens, basements, recreation rooms, etc.

Installation of the Buffalo Home Ventilating Unit is very simple. The location should be close to the ceiling and as far from the range as convenient. In houses already built, the installation merely requires

cutting a square hole through the wall. When plans are drawn, include the specifications listed in the next column.

The design of the box incorporates every advantage and improvement. The doors are made from a single piece of heavy gauge metal, die shaped, very rigid and strong. The box is made to fit walls of varying thickness, and only one pair of rods need to be adjusted to fit the box to the wall. It is practical to use a BUFFALO HOME VENTILATING UNIT of this size in walls as thin as 5 $\frac{3}{4}$ " only because of the compact design of the 12" BREEZO fan used in the box. This fan has blades set at just the right angle to handle a large volume of air at comparatively low speed, thus assuring quiet operation. Motor is fully enclosed, and equipped with wool-oiled bearings, requiring the minimum of attention.

Capacity, 700 C.F.M., 1150 R.P.M., 60 Cycle,  
110 Volts, Single Phase.







## Buffalo "Breezo" for Window Installation

Designed for installation in the upper part of a window, the Glass Panel Breezo Ventilating Fan is used in offices as well as homes. Light in weight, yet very sturdy, it is compact, good-looking, and quite inexpensive. Anyone can install it in a few minutes in upper part of window casing with no tool except a screw driver. When fan is not in use window may be closed.

The panel is made in three sizes, one to fit windows from 26 inches to 36 inches wide, another from 36 inches to 46 inches; the largest size from 46 inches to 60 inches. The panels are shipped complete with fan and switch, but without glass owing to breakage in transit.

The BREEZO Fan supplied with this panel has a 12-inch wheel, designed to move a large volume of air. Blades, supporting arms and panels are pressed steel, light in weight but very strong.

A 750 R.P.M. or 1150 R.P.M. motor can be furnished, either one way or reversing, at the same price.

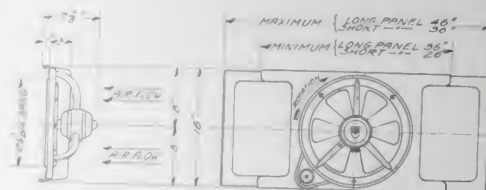
**Buffalo Forge Company**  
Buffalo, New York

In Canada:  
Canadian Blower & Forge Co., Ltd., Kitchener, Ont.

Printed in U. S. A. From the BUREAU

When the fan is equipped with pull switch, it is always attached to the fan, completely wired ready for use.

The 12" fan can also be furnished on adjustable all-metal panels made in the following sizes: 22" to 26", 26" to 36", 36" to 46". Prices are the same for either glass or metal panel.



Arrangement	Shipping Wgt.
Complete with Panel and Switch .....	35 lbs.
With Switch, without Panel .....	28 lbs.
Without Switch or Panel .....	25 lbs.

*Breezo Glass Panel Fans do not shut out the light, nor interfere with opening or closing of upper window.*





# Keep COOL

with - -

## BREEZO COOLING FANS

**B**REEZO Cooling Fans are an invitation to summer patrons to visit your place of business. The cool, refreshing atmosphere created by the use of such fans assures a comfortable, as well as an enjoyable spot in which to congregate. Your obliging consideration of the customer's comfort during hot, sultry weather will be repaid by a decidedly increased patronage . . . for business, now more than ever before, goes where it is invited and lingers under pleasant conditions.





# Keeping Cool Is Made Easy With BREEZO Cooling Fans

- Two Speeds
- Adjustable Blast
- Light Weight Construction

**H**UNDREDS of prospects are now eagerly awaiting Breezo Cooling Fans in every community! These include owners of restaurants, cafes, beer-gardens, billiard rooms, small theatres, dance halls, department stores, drug stores, soda fountains, in fact—owners of every kind of establishment where people congregate.

Developed several years ago for comfort cooling in hot places, the new Stream-line, adjustable, two-speed Breezo Cooling Fan is an enormous improvement in every respect.

Of greatest importance is the tilting fan head, recently perfected, which permits directing the blast up, down, or horizontally as desired. In most business places, stores, restaurants, cafes, etc., this is an important feature since it permits effective air motion without drafts.

The fan is of improved three-blade high-efficiency design which handles a maximum amount of air with very little noise. A

● Full view of the new two-speed adjustable stream-line Breezo Cooling Fan, blast horizontal.



"Keep Cool With BREEZO Cooling Fans"



two-speed motor provides a desirable capacity range. Attractive aluminum finished wire guard is provided, as shown.

Base of the fan is cast iron, large enough to prevent tipping yet light enough to facilitate moving. Fan and pedestal can be easily revolved on this base, so that blast may be directed anywhere in the room.

With Breezo Cooling Fans, air circulation in the room is assured. Circulation means the effect of cooling, thus patrons appreciate these fans.

*Close-up, showing fan tilted to blow slightly downward. Head is adjusted by turning thumb-wheel located at back of switch. Fan is rotated by turning pedestal in the cast iron base by means of attractively designed handles at switch.*



*Breezo Cooling Fan in Dry Goods Store. Shopping in comfort is assured the patrons of this store.*







*Muggy days hold no terrors for the patrons of this modern cafeteria.*

## SPECIFICATIONS

### Breezo Cooling Fans

Size	Speed-R.P.M.	Capacities-C.F.M.	Weight, Lbs.	Overall Height
18" Two-Speed Unit	1750 and 1150	3300 and 2200	225	8 ft., 6 ins.
18" Single Speed Unit	1150	2200	225	8 ft., 6 ins.

## DETAILS and PRICES

Covering 110 Volt, 60 Cycle Single Phase Motors.

### • Two Speed Units

1150 and 1750 R.P.M.

18" .....List Price \$107.00

### • Single Speed Units

1150 R.P.M.

18" .....List Price \$94.00

Prices for other current characteristics on application.

## BUFFALO FORGE COMPANY

Buffalo, New York

In Canada: Canadian Blower & Forge Co., Ltd., Kitchener, Ont.





enjoy COOL COMFORT  
IN HOT WEATHER





**C**OOL—refreshing—airy—that is how you can have your rooms on the hot, sultry nights this summer. No more restless, sleepless nights—no more irritating, heat-fatigued days. Regardless of the weather conditions, “Breez-Air” Attic Ventilating Fans provide cool breezes in your home—not unlike the fresh, gentle breeze at the lake- or sea-side.

At night, the “Breez-Air” Fan reduces the inside room temperature to within two or three degrees of the outside night temperature—and assures cool, comfortable rooms in the hottest weather. Why let the summer season hold such aggravating discomforts for you when the installation of a new “Breez-Air” Fan is so simple, effective and low in cost.

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# Be Comfortable on the Hottest Nights with a "BREEZ-AIR" Fan

**T**HE Buffalo "BREEZ-AIR" process of cooling is by simply circulating the air which in turn promotes evaporation and absorption of stored-up heat. The easiest and most efficient application of this cooling fan is in the attic of the home.

As the sketches on page four illustrate, best results are obtained by providing an opening so the air can be drawn from the hall on the top floor of the residence, using a connection between the unit and the attic floor. A perfect circulation of cool, fresh air is thus insured. The fan pulls the hot, stifling air from the rooms below and discharges it into the attic. This undesirable waste air is then forced outside through suitable openings, usually through attic windows or grills, which should have an area equal to the fan diameter for best results. At the same time fresh air is quietly drawn into the home. This forced air circulation through the rooms removes the heat stored up during the day in the walls, roof and ceiling and promotes a cool, refreshing breeze through the complete house.

In order to ventilate any desired part of your home, merely open the doors of the rooms to be ventilated and open the windows in these rooms. The usual practice is to ventilate through the rooms on the first floor, such as dining room, living room, etc., during the early part of the evening and before retiring close these windows and open the bedroom windows and doors.

## QUIET - - - a "Breez-Air" feature

The "Breez-Air" Attic Fan has all the features necessary to successfully fulfill its purpose. It is reliable, efficient and QUIET in operation, easy to install, and reasonably priced.

To prove the quiet operation of this fan, decibel readings have been taken in bedrooms at 11 P.M. With fan in operation, reading was not more than 38. When fan was not operating, reading was 29. Readings in the living room on the first floor gave only 35 decibels with fan operating and 30 decibels when fan was not in operation.

Fan bearings are mounted in rubber and motor also has a resilient mounting. Connected by means of a V-belt drive, the unit operates quietly without vibration.





# The "Breez-Air" Fan Was Engineered Especially For Ventilation of the Home - -

The 30" fan capacity is sufficient to give an air change once every two and one-half minutes in the average home which gives 24 air changes per hour. This means that you should be able to cool down the residence after sunset by 80% of the difference between the outside and the inside temperatures.

Tests have shown that the air enters the windows at a velocity of from 190 to 210 feet per minute, and this 30" unit is of ample capacity for serving up to and including an eight-room home with, say three, bedrooms.

## Four Sizes Available

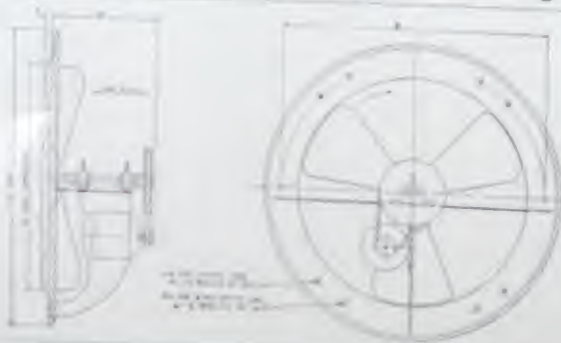
"BREEZ-AIR" Fans are stocked in four sizes—30", 36", 42" and 48". These may be installed with mounting boxes in either of two types. The box is usually made locally of wood, equally as satisfactory as steel and generally more economical. However, steel mounting boxes are stocked for quick shipment.

The 30" fan is recommended for the average home, the 36" size for larger buildings. For business places, dance halls, or other large structures which are so constructed as to permit cooling thru the attic or overhead rooms, the 42" and 48" sizes are recommended.

If you have a cooling problem involving an unusually large building, submit particulars to us. Our engineers will gladly advise the correct installation without obligation to you.

Dimensions of "Breez-Air" Fans

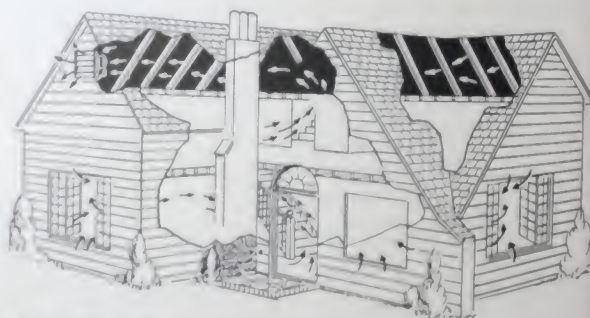
Size	A	B	C	D	E
30"	30 <sup>1</sup> / <sub>4</sub>	35 <sup>1</sup> / <sub>2</sub>	40	15	1
36"	37	42	47	16	<sup>7</sup> / <sub>8</sub>
42"	43	45 <sup>1</sup> / <sub>4</sub>	47	18 <sup>3</sup> / <sub>4</sub>	1 <sup>3</sup> / <sub>4</sub>
48"	49	52 <sup>1</sup> / <sub>4</sub>	54	22	2



## Easy, Inexpensive Installation

The installation above shows the usual method of installing the Buffalo "Breez-Air" Fan. Grills and suction inlet boxes are employed. Air is discharged into the attic, suitable openings being provided so that it can pass outside.

The drawing below shows a method of installing the fan where the attic is reasonably tight. The "Breez-Air" is installed in a side wall or window with louver or binged window and the attic stairway may be used instead of grills in the ceiling.



## Put The "Breez-Air" In Your Home For Summer Comfort

When the heat is almost unbearable this Summer, you will enjoy the comfort and refreshing coolness of a "Breez-Aired" home.

Full Price Information is contained in Sheet No. 3019, which we will send upon request.

**BUFFALO FORGE COMPANY**  
Buffalo, N. Y.





No. 2-E Variable Speed Blower  
with Regulator



No. 2-EH  
Constant Speed Blower



No. 4-E Constant Speed Blower.  
Note substantial construction.

## *"Buffalo"* Electric Blowers (TYPE "FB") Variable and Constant Speed

"Buffalo" Variable and Constant Speed Electric Blowers are more widely used than any other blower of similar type, and are recognized as the most efficient small units on the market for a great variety of uses.

The variable speed type is made in two sizes only—Nos. 2-E and 2-EH. These are used principally for supplying air to forge fires, as well as for other intermittent service. They operate on any 110 or 220 volt direct current or 25, 40, 50 or 60 cycle single phase alternating current and are provided with an enclosed six speed regulator. Wire and plug are furnished with each outfit, as shown at left.

Frequently pressures higher than one pound are required for gas boosting and other industrial problems. For special problems requiring very high pressures, full information furnished on request. We have three additional sizes of direct connected electric blowers.

Individual blowers for oil or gas furnaces located some distance apart are more economical than a larger, higher pressure fan, as the pressure required to overcome the friction of a long duct is frequently half the total pressure requirements.

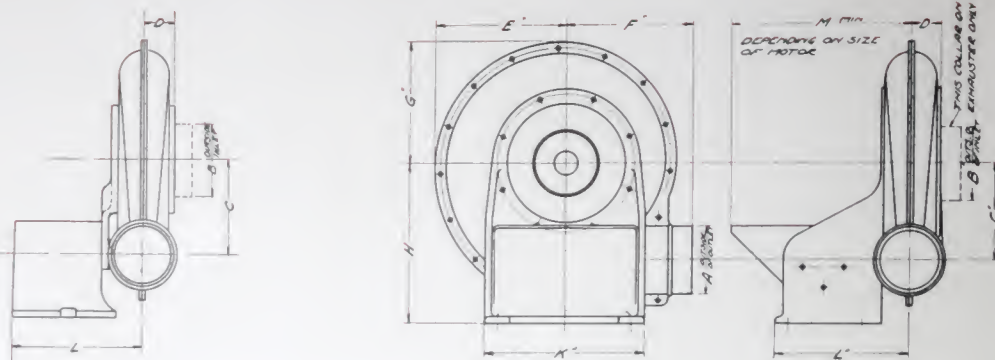
The sizes listed here are used for blowing small furnaces, for removing scale from power hammers, and chips in metal and wood-working operations, as well as for exhausting from grinding and buffing wheels. They are of the moderately high speed, high efficiency type, with narrow blades, heavy housings and substantial bases. The larger sizes, being designed especially for use with standard motors, have adjustable steel bases to fit motors of any make, and the blower wheel is so constructed that it can be mounted directly on the motor shaft of a standard motor without extension.

The housings are reversible and may be readily changed from right to left hand. The multi-rating table on opposite side shows the capacities at different speeds, the pressure at which the air is delivered, and the horsepower required. It is possible to still further vary the capacity by changing the diameter of the wheel.

All parts are carried in stock, and shipment on all sizes can be made promptly due to the fact that standard stock motors are used.

"Buffalo" Type "E" Blowers will be found in every branch of industry. Railroads in particular, use a large number of oil-burning blacksmith forges, cupolas, furnaces, etc.





Size	H.P. Motor	A	B	C	D	E	F	G	H	K	L	M
2-E	1/30	3	3	5 1/8	1 1/2	6 3/4	6	6 3/8	8 3/8	8 3/8	9 1/8	-----
2-EH	1/8	3	3	5 1/8	1 1/2	6 3/4	6	6 3/8	8 3/8	8 3/8	9 1/8	-----
3-E	1/4	4	4	6	1 3/4	7 7/8	7 3/8	7 1/4	9 1/2	8 3/4	9 1/8	-----
4-E	1/2	4 1/2	5	7 3/4	1 7/8	9 7/8	8 7/8	9 1/8	10 7/8	13	11 1/2	-----
4 1/2-E	*	5	5 1/2	7 1/4	2 1/8	9 7/8	9 1/2	9 1/8	12	14 3/4	10	13
5-E	*	5 1/2	6 3/8	10 1/2	2 1/8	13 1/8	12	12 1/4	15	12	11 3/8	14 1/8
5 1/2-E	*	7	7 3/8	12 1/4	3 1/8	15 1/8	13 3/4	14 7/8	17 1/2	19	16 1/4	20
6-E	*	7 1/4	8	13 3/8	3 3/8	17 1/4	15	16 1/4	19	19	16 3/8	21

\* H.P. for the larger sizes depends on capacities and pressures.

## Multi-Rating Tables

### Type "FB" Blowers

Capacities and Statistic Pressures at 70° F and 29.92" Bar.

Nos. 2-E, 2-EH, 3-E and 4-E

No. 2-E BLOWER 1750 R. P. M. INCHES				No. 2-EH BLOWER 3400 R. P. M. INCHES				No. 3-E BLOWER 3400 R. P. M. INCHES				No. 4-E BLOWER 3400 R. P. M. INCHES			
Cap.	Static	Total	H.P.	Cap.	Static	Total	H.P.	Cap.	Static	Total	H.P.	Cap.	Static	Total	H.P.
0	9	9	.0065	0	3.40	3.40	.045	0	4.30	4.30	.075	0	4.68	4.68	.133
30	.821	.843	.0102	30	3.25	3.30	.058	45	4.33	4.37	.092	90	4.60	4.65	.183
50	.730	.790	.0143	60	3.09	3.17	.075	90	4.29	4.37	.121	180	4.45	4.57	.247
70	.593	.720	.0180	100	2.75	2.98	.104	150	4.01	4.21	.172	300	4.00	4.31	.356
130	0	.422	.0270	150	2.07	2.64	.136	225	3.27	3.74	.248	450	2.72	3.43	.497
				200	1.26	2.21	.163	285	2.46	3.22	.306	570	1.20	2.40	.608
				250	.00	1.50	.201	315	2.05	2.94	.331	646	.00	1.60	.678
								360	1.30	2.51	.363				
								390	0.78	2.20	.380				

# Buffalo Forge Company

Buffalo, New York

IN CANADA: CANADIAN BLOWER and FORGE CO., LTD., KITCHENER, ONT.



*"Buffalo"*

ELECTRIC

Baby Conoidal  
Ventilating Fans

*for*

Ventilating  
Exhausting  
Blowing  
Cooling  
Drying



Bulletin No. 475-D

A. I. A. File No. 30 d 1



# Buffalo Baby Conoidal Ventilating Fans



No. 1



No. 2



No. 3



No. 3 1/2 Baby Conoidal with Adjustable Base

ONE of the most highly developed lines we manufacture, Buffalo Baby Conoidal Fans are in use in thousands of industrial plants, stores, schools and public buildings of all types. They are used for ventilating, exhausting, cooling and many other purposes. Industrial uses include exhausting from hoods and vats where gas, moisture, steam, smoke or foul air must be removed. In schools and public buildings, Baby Conoidal Fans are frequently used to ventilate toilet rooms, telephone booths, etc. Another common application is for oil burning equipment where mechanical atomization is used. Many of these fans are used for blowing air into generators and motors to keep them cooled to proper operating temperature.

With this wide variety of uses, it may be seen that the Baby Conoidal is a versatile fan! All sizes except the Number One can be furnished for clockwise or counter-clockwise rotation. All sizes have cast iron housings and on all sizes cast aluminum wheels are furnished as standard equipment. These wheels are the multiblade, high-efficiency type used in our large ventilating fans. They are very quiet in operation. On all sizes, position of discharge may be changed as desired in a few minutes time.

You will note from tables shown on next page that there is a complete range of motors, speeds and capacities available for stock shipment, including motors for 110 or 220 volt direct current and 25 and 60 cycle single phase alternating current.

For any service which falls within the capacity range of Baby Conoidal Fans, you can buy no better equipment.



BUFFALO ELECTRIC VENTILATING FANS



FAN  
SIZE

1

2

3

3 1/2

Fan Size  
Niagara Wheel

1

2

3

3 1/2

DUPLEX  
WHEEL

High T

2N

3N

3 1/2 N

3 1/2 N

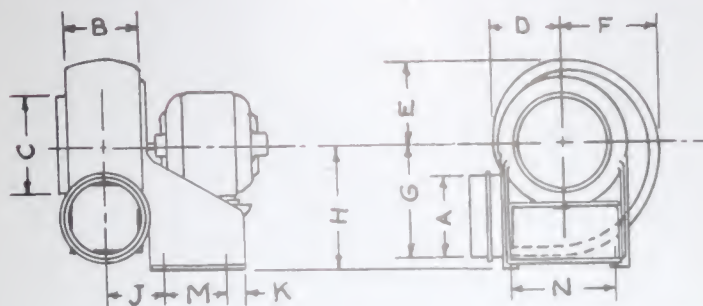
3 1/2 D

3 1/2 D

3 1/2 D



# Baby Conoidal Dimensions



FAN SIZE	A	B	C	D	E	F	G	H	J	K	M	N
1	3	2 7/8	4	3	3 1/8	3 7/8	4 7/8	4 3/4	3 1/8	2	0	7 1/8
2	4	3 7/8	5 1/2	3 21/32	4 9/32	4 29/32	5 3/4	6 1/4	2 7/8	3/8	4 1/4	8 1/8
3	7 1/2	5 3/8	7 1/8	4 1/8	5 27/32	7 1/8	8 21/32	9 1/4	4 1/8	1/2	7	10 1/2
3 1/2	9	7	9 7/8	6 3/8	7 5/8	8 1/8	10 1/8	11 1/2	6	1	7	14

Fan Size Niagara Wheel	Speed (R. P. M.)	H. P. Motor	Wheel Diam. (Inches)	Spgg. Weight (Approx.)	CAPACITY IN CUBIC FEET PER MIN.								LIST PRICE		
					Free Del. c.f.m.	1/8" S.P.	1/4" S.P.	1/2" S.P.	3/8" S.P.	1/2" S.P.	3/4" S.P.	1" S.P.	1 Phase 60 A. C.	2 and 3 Phase 60 A. C.	Direct Current
1	1750	1/30	4 1/4	40	98	85	72	47	—	—	—	—	\$45.00	\$ —	\$60.00
2	1750	1/15	5 1/8	55	206	187	162	125	—	—	—	—	50.00	—	70.00
3	1750	1/4	7 3/8	125	950	895	841	785	725	662	593	385	70.00	86.00	86.00
	1150	1/8	7 3/8	125	625	540	445	340	—	—	—	—	72.00	90.00	90.00
3 1/2	1750	1	9 1/4	300	1900	1840	1780	1720	1655	1593	1530	1400	200.00	175.00	290.00
	1440	3/4	9 1/4	300	1560	1495	1425	1350	1270	1190	1105	930	†165.00	†175.00	—
	1150	1/2	9 1/4	300	1245	1155	1063	965	863	755	630	—	145.00	150.00	150.00
	870	1/8	9 1/4	300	945	825	695	550	—	—	—	—	140.00	150.00	150.00
DUPLEX WHEEL	1750	1/4	9 3/4	300	1175	1130	1080	1030	980	920	860	705	98.00	120.00	120.00
	1440	1/8	9 3/4	300	967	910	850	785	713	625	500	—	†110.00	†135.00	—
	1150	*1/8	9 3/4	300	722	700	617	522	367	—	—	—	105.00	120.00	125.00

†=25 cycle motor. \* = 1/4 H. P. motor used on 1150 rev. 3-phase units with Duplex Wheel.

## High Torque, Capacitor Motors, Constant Speed

			1/15	65
2N	1750	\$ 63.00	1/4	140
3N	1750	82.00	3/4	350
3 1/2 N	1440	*188.00	1/3	320
3 1/2 N	1140	160.00	1/4	320
3 1/2 D	1750	115.00	1/8	320
3 1/2 D	1140	120.00		

## Three Speed, Capacitor Motors, with Controllers

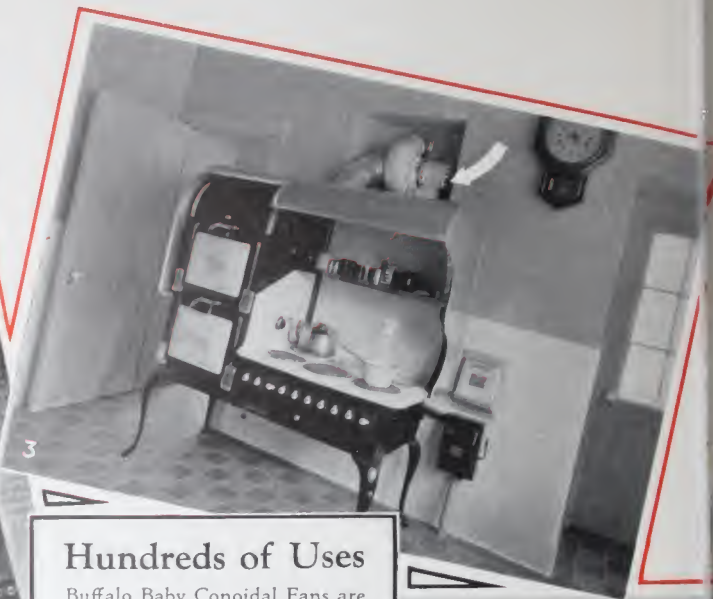
2N	1620	\$ 85.00	1/15	75
3N	1620	115.00	1/4	150
3 1/2 N	1080	190.00	1/3	330
3 1/2 D	1620	150.00	1/4	320



BUFFALO ELECTRIC VENTILATING FANS







## Hundreds of Uses

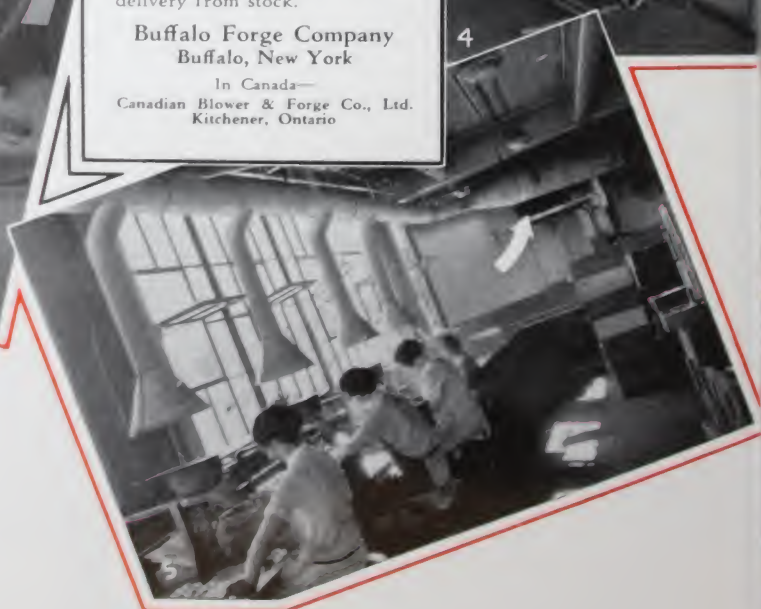
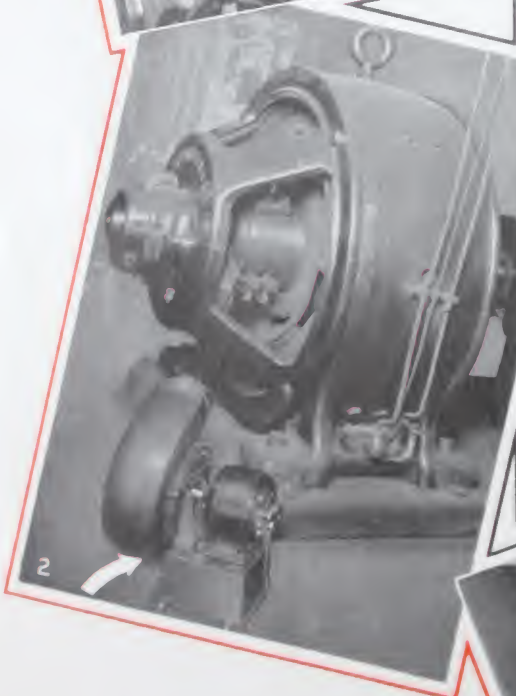
Buffalo Baby Conoidal Fans are in use in every branch of industry, as well as in public buildings and homes. The applications shown here are only a few of many.

- 1—Baby Conoidal Fan supplies air to a special drying system on printing press.
- 2—Cooling a large generator.
- 3—Exhausting heat and cooking odors from electric range in home.
- 4—Baby Conoidal Fan used on currency dryer, U.S. Bureau of Engraving and Printing.
- 5—Exhausting hot air and fumes from melting pots.

Buffalo Baby Conoidal Fans are efficient, quiet and economical. Prompt delivery from stock.

**Buffalo Forge Company**  
Buffalo, New York

In Canada—  
**Canadian Blower & Forge Co., Ltd.**  
Kitchener, Ontario

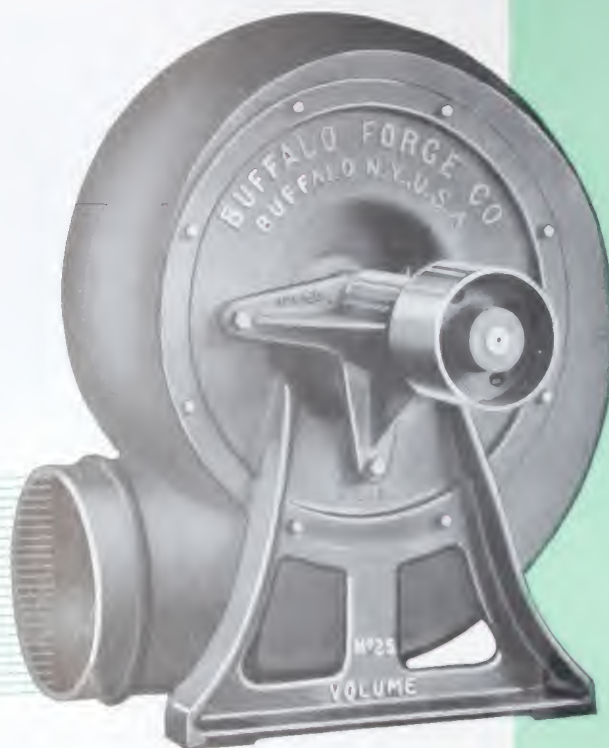




*"Buffalo"*

VOLUME

FANS



Equipped with Ball Bearings  
Reversible Discharge Inter-  
changeable for Clockwise or  
Counter Clockwise Rotation.

FOR BLOWING OR EXHAUSTING

A. I. A. File No. 30 d 1

*Bulletin 2507-D*



## BUFFALO VOLUME FANS



Three of the eight positions to which the housing of Buffalo Volume Fans can be adjusted. Change is made by simply unbolting the side plates and swinging the housing to the desired position.

Buffalo Volume Fans are a development from the "B" Volume Blowers and Exhausters which have been popular for so many years. The Volume Fans are equipped with ball bearings giving better efficiencies, and are adjustable to eight different positions of discharge and to either clockwise or counter clockwise rotation. The one fan can be used as either a blower or exhauster.

Side plates and feet are cast in one piece to permit adjusting the housing to any desired direction of discharge.

Heavy duty, dust-proof ball bearings with deep raceways in both inner and outer rings, insure efficient, trouble-free running.

Volume Fans have the solid peripheral shell construction that made "B" Volume Fans so popular. They are rigid and compact and resist deterioration from moisture, heat, acid fumes, or gritty dust.



Note the simplified plan of assembly. The steel wheel blades are securely riveted to the malleable iron spider and to the steel side plates. Shaft carried by heavy duty ball bearings.

*Buffalo*

No. 23 V

A Few of  
Volume

Burn  
Polishing  
Blast, Fur  
Blowing, S  
The c

Fan  
No.

	A.P.M.
21	179
22	279
23	472
24	650
25	906
26	1320
27	2235
28	3723
29	6310

Fan  
No.

	A.P.M.
22	685
23	1160
24	1598
25	2225
26	3240
27	5490
28	9150
29	15500

S.P. is  
A.P.M.  
H.P. is



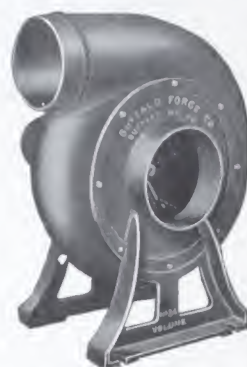


No. 23 Volume Fan, direct motor drive.

## BUFFALO VOLUME FANS

### with Direct Motor Drive

The arrangement for motor drive is an attractive feature of the new design of Buffalo Volume Fans. A special center plate casting with an adjustable support is used to mount the direct connected motor, replacing the bearing arm. This eliminates the need of a cast iron sole plate, saving size and weight and still retaining the reversible housing feature.



No. 24 Volume Fan, showing inlet side.

### A Few of the Uses for which Buffalo Volume Fans Are Especially Adapted:

Burning Sawdust, Conveying Material, Drying Systems, Emery and Polishing Wheels, Exhausting Smoke, Forced Draft, Forge and Furnace Blast, Fume Exhaust, Hollow Blast Grates, Mine Ventilation, Organ Blowing, Shavings Exhaust Systems, Toilet Ventilation, Vapor Removal.

The one fan can be used for either blowing or exhausting.

### Capacities, Speeds and Horsepower of Volume Fans

Fan No.	1" S.P. .58 oz.			2" S.P. 1.16 oz.			3" S.P. 1.73 oz.			4" S.P. 2.31 oz.			5" S.P. 2.89 oz.		
	A.P.M.	R.P.M.	H.P.	A.P.M.	R.P.M.	H.P.	A.P.M.	R.P.M.	H.P.	A.P.M.	R.P.M.	H.P.	A.P.M.	R.P.M.	H.P.
21	179	1765	.05	253	2498	.13	310	3063	.24	358	3533	.36	400	3925	.51
22	279	1413	.07	395	1998	.20	485	2470	.37	560	2825	.57	625	3160	.80
23	472	1087	.12	669	1538	.34	821	1885	.63	946	2173	.96	1059	2431	1.35
24	650	927	.17	921	1311	.47	1130	1610	.87	1303	1855	1.32	1458	2073	1.86
25	906	785	.23	1283	1110	.65	1575	1361	1.21	1817	1570	1.84	2030	1756	2.59
26	1320	649	.34	1870	917	.95	2293	1136	1.76	2640	1299	2.68	2960	1451	3.78
27	2235	500	.57	3160	706	1.60	3880	866	2.98	4475	1000	4.54	5000	1118	6.38
28	3723	387	.95	5274	547	2.67	6475	671	4.97	7460	775	7.56	8350	865	10.65
29	6310	298	1.60	8940	421	4.53	10980	516	8.43	12660	595	12.81	14150	665	18.05
Fan No.	6" S.P. 3.47 oz.			7" S.P. 4.05 oz.			8" S.P. 4.62 oz.			9" S.P. 5.19 oz.			10" S.P. 5.77 oz.		
	A.P.M.	R.P.M.	H.P.	A.P.M.	R.P.M.	H.P.	A.P.M.	R.P.M.	H.P.	A.P.M.	R.P.M.	H.P.	A.P.M.	R.P.M.	H.P.
22	685	3463	1.02	740	3740	1.30	791	3997	1.61	1418	3258	3.24	1496	3435	3.80
23	1160	2665	1.73	1252	2874	2.22	1340	3074	2.72	1952	2780	4.46	2060	2930	5.22
24	1598	2273	2.38	1722	2542	3.06	1842	2623	3.74	2720	2352	6.21	2868	2480	7.28
25	2225	1924	3.31	2400	2075	4.26	2567	2220	5.21	3960	1945	9.05	4175	2050	10.60
26	3240	1590	4.82	3492	1716	6.20	3740	1835	7.60	6700	1499	15.31	7060	1580	17.95
27	5490	1224	8.15	5910	1321	10.50	6320	1413	12.85	11180	1160	25.50	11800	1223	29.90
28	9150	950	13.60	9860	1023	17.52	10550	1090	21.40	18950	890	43.30	20000	940	50.75
29	15500	730	23.10	16720	786	29.70	17900	841	36.30						

S.P. is static pressure.

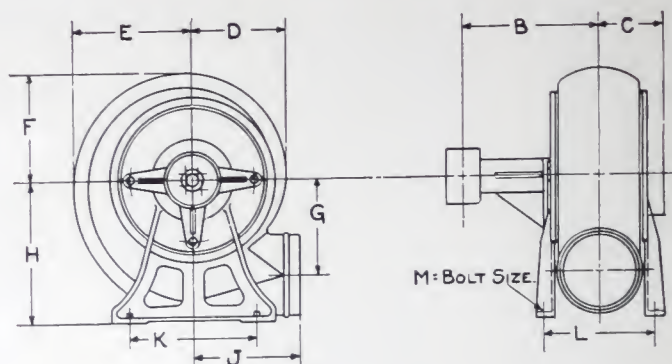
A.P.M. is cu. ft. of air per minute.

H.P. is power required to deliver air at pressure given.

*Buffalo*



## Specifications for BUFFALO Volume Fans



Dimensions in Inches

No.	B	C	D	E	F	G	H	J	K	L
21	9 <sup>1</sup> / <sub>8</sub>	4	5 <sup>3</sup> / <sub>8</sub>	6 <sup>9</sup> / <sub>8</sub>	5 <sup>7</sup> / <sub>8</sub>	5 <sup>5</sup> / <sub>8</sub>	8	6 <sup>1</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>2</sub>	7
22	11 <sup>1</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>4</sub>	6 <sup>5</sup> / <sub>8</sub>	8 <sup>1</sup> / <sub>8</sub>	7 <sup>3</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>8</sub>	10	7 <sup>3</sup> / <sub>4</sub>	7	8 <sup>3</sup> / <sub>4</sub>
23	11 <sup>1</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>8</sub>	8 <sup>1</sup> / <sub>2</sub>	10 <sup>1</sup> / <sub>8</sub>	9 <sup>9</sup> / <sub>8</sub>	8 <sup>5</sup> / <sub>8</sub>	12 <sup>7</sup> / <sub>8</sub>	10	10 <sup>1</sup> / <sub>2</sub>	10 <sup>3</sup> / <sub>4</sub>
24	14 <sup>1</sup> / <sub>4</sub>	6 <sup>1</sup> / <sub>8</sub>	9 <sup>7</sup> / <sub>8</sub>	12 <sup>3</sup> / <sub>8</sub>	11 <sup>1</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>8</sub>	15	11 <sup>1</sup> / <sub>4</sub>	13	12
25	14 <sup>1</sup> / <sub>4</sub>	7 <sup>5</sup> / <sub>8</sub>	11 <sup>5</sup> / <sub>8</sub>	14 <sup>5</sup> / <sub>8</sub>	13 <sup>1</sup> / <sub>8</sub>	11 <sup>7</sup> / <sub>8</sub>	17 <sup>3</sup> / <sub>8</sub>	12 <sup>1</sup> / <sub>2</sub>	16	13 <sup>1</sup> / <sub>4</sub>
26	19 <sup>1</sup> / <sub>4</sub>	9 <sup>1</sup> / <sub>4</sub>	14 <sup>1</sup> / <sub>8</sub>	17 <sup>3</sup> / <sub>4</sub>	15 <sup>7</sup> / <sub>8</sub>	14 <sup>1</sup> / <sub>8</sub>	21	15 <sup>1</sup> / <sub>4</sub>	19 <sup>1</sup> / <sub>2</sub>	18
27	19 <sup>1</sup> / <sub>4</sub>	11 <sup>5</sup> / <sub>8</sub>	18 <sup>1</sup> / <sub>8</sub>	22 <sup>1</sup> / <sub>8</sub>	20 <sup>5</sup> / <sub>8</sub>	18 <sup>5</sup> / <sub>8</sub>	27	19 <sup>1</sup> / <sub>2</sub>	26	23
*28		15	23 <sup>1</sup> / <sub>8</sub>	29 <sup>3</sup> / <sub>8</sub>	26 <sup>1</sup> / <sub>4</sub>	23 <sup>7</sup> / <sub>8</sub>		28		
†29		18 <sup>5</sup> / <sub>8</sub>	30 <sup>1</sup> / <sub>8</sub>	38 <sup>1</sup> / <sub>8</sub>	34 <sup>1</sup> / <sub>8</sub>	30 <sup>7</sup> / <sub>8</sub>		35 <sup>1</sup> / <sub>2</sub>		

\*Fan No. 28 has ball bearing arm but is not reversible.

†Fan No. 29 has bearings on pedestal and is not reversible.

Nine sizes cover a wide range of requirements. Increase from one size to another is uniform so that the capacities, speeds and pressures and power ratings of the different sizes bear a definite relation to each other.

Dimensions in Inches

No.	Outlet Diameter Outside	Inlet Diameter Outside	Pulleys		Weight Pounds
			Diameter	Face	
21	4 <sup>1</sup> / <sub>2</sub>	5	3	2 <sup>1</sup> / <sub>2</sub>	65
22	5 <sup>1</sup> / <sub>2</sub>	6	4	3	110
23	7 <sup>1</sup> / <sub>2</sub>	8	4	3	165
24	8 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>8</sub>	5 <sup>3</sup> / <sub>4</sub>	3 <sup>5</sup> / <sub>8</sub>	250
25	10	10 <sup>1</sup> / <sub>2</sub>	5 <sup>3</sup> / <sub>4</sub>	3 <sup>5</sup> / <sub>8</sub>	350
26	12	12 <sup>3</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>2</sub>	6 <sup>1</sup> / <sub>2</sub>	500
27	16	16 <sup>3</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>2</sub>	6 <sup>1</sup> / <sub>2</sub>	880
28	20	20 <sup>7</sup> / <sub>8</sub>	9 <sup>1</sup> / <sub>2</sub>	8 <sup>1</sup> / <sub>4</sub>	1900
29	26 <sup>1</sup> / <sub>2</sub>	26 <sup>3</sup> / <sub>4</sub>			4500

# Buffalo Forge Company

BUFFALO, NEW YORK

In Canada—Canadian Blower and Forge Co., Ltd., Kitchener, Ont.

*Buffalo*

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U.S.A.



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# Buffalo Steel Pressure Blowers



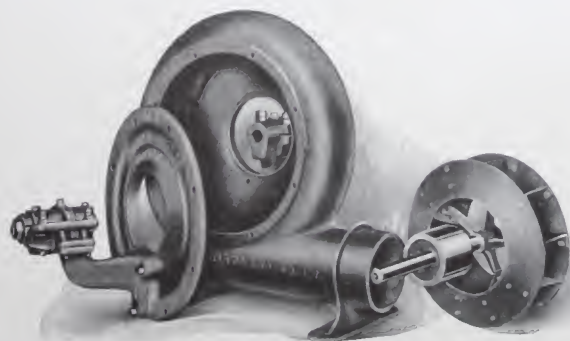
Steel Pressure Blower—Pulley Driven

Made in twelve sizes, with a wide range of capacities; the smaller steel pressure blowers are used extensively for supplying air to cupolas and forge fires and also for burning pulverized coal or fuel oil. Other uses include mould-cooling in gas plants and supplying air to malleable iron furnaces. The smaller fans are capable of delivering air at pressures up to 6 to 8 ounces, while the larger ones are capable of delivering against pressures up to a maximum of 16 ounces.

"Buffalo" steel pressure blowers have a heavy cast iron shell, of solid peripheral construction, with easily removable center plates, per-

mitting the blast wheel to be readily removed or inspected without disturbing the blower on its foundations. This is one of the distinguishing features of "Buffalo" steel pressure blowers.

All fans up to and including the No. 6 are equipped with one pulley. The larger sizes have two pulleys, one on each side of the shell. All standard blowers have bottom horizontal discharge. The blowers having one pulley have the pulley located on the right hand side of the shell when facing the discharge, and are designated as clockwise bottom horizontal discharge. As the larger sizes have two pulleys, it is only necessary to designate the discharge when ordering. Either clockwise or counter-clockwise can be furnished at the regular price, but all discharges other than bottom horizontal are special, usually having to be made up, and there is an extra charge of 10% on account of special core boxes being required for casting, while the standard blowers are manufactured in large quantities.



Parts of Steel Pressure Blower

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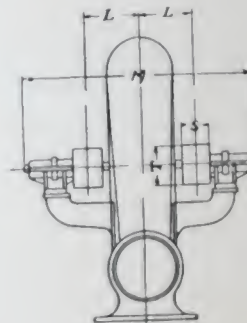
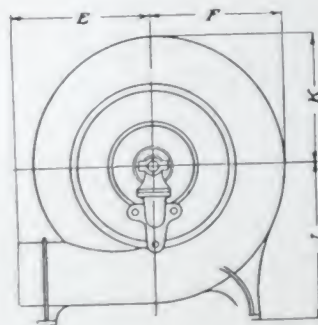


# Table of Capacities, with Speed and Horsepower Requirements

No. of Blower	3 Ounce			4 Ounce			5 Ounce			6 Ounce			No. of Blower	7 Ounce		
	R.P.M.	Cap.	H.P.	R.P.M.	Cap.	H.P.	R.P.M.	Cap.	H.P.	R.P.M.	Cap.	H.P.		R.P.M.	Cap.	H.P.
2	4320	247	0.53	4990	285	.81	5595	320	1.01				4	4395	785	3.05
3	3420	490	0.81	3950	565	1.25	4435	635	1.75	4840	690	2.3	5	3870	890	3.38
4	2880	520	0.86	3330	600	1.32	3730	670	1.85	4065	730	2.40	6	3360	1160	4.42
5	2540	580	0.96	2930	670	1.47	3290	755	2.06	3585	825	2.70	7	2985	1375	5.25
6	2190	755	1.24	2550	880	1.94	2860	985	2.70	3115	1076	3.52	8	2710	2080	7.93
7	1940	895	1.46	2255	1045	2.27	2535	1170	3.32	2765	1275	4.15	9	2425	2940	11.2
8	1763	1353	2.20	2050	1570	3.43	2300	1765	4.80	2510	1925	6.28	10	1815	4305	16.4
9	1577	1913	3.13	1840	2225	4.84	2060	2500	6.80	2245	2720	8.87	11	1510	5300	20.3
10	1180	2797	4.56	1375	3255	7.09	1540	3655	9.93	1680	3990	13.0	11½	1200	5940	23.4
11	985	3450	5.63	1145	4010	8.74	1285	4515	12.3	1400	4915	16.1	12	1230	6880	26.3
11½	778	3860	6.5	907	4500	10.1	1020	5040	14.1	1110	5500	18.5				
12	799	4478	7.3	930	5210	11.3	1045	5840	15.9	1135	6380	20.8				

No. of Blower	8 Ounce			10 Ounce			No. of Blower	12 Ounce			14 Ounce			16 Ounce		
	R.P.M.	Cap.	H.P.	R.P.M.	Cap.	H.P.		R.P.M.	Cap.	H.P.	R.P.M.	Cap.	H.P.	R.P.M.	Cap.	H.P.
5	4130	950	4.14	4000	1385	7.55	6	4380	1510	9.90	4195	1930	14.7			
6	3585	1240	5.42	3560	1640	8.90	7	3880	1790	11.7	3810	2920	22.3	4060	3115	27.1
7	3180	1470	6.40	3225	2480	13.6	8	3525	2705	17.6	3410	4125	31.4	3635	4400	38.3
8	2890	2220	9.66	2890	3500	19.0	9	3155	3825	25.0	2545	6040	46.1	2720	6310	56.7
9	2585	3135	13.7	2160	5135	27.9	10	2360	5595	36.5	2120	7455	56.7	2265	7940	69.1
10	1935	4590	20.0	1800	6320	34.4	11	1970	6900	45.0	1680	8340	65.3	1795	8960	80.5
11	1615	5660	24.7	1425	7150	40.2	11½	1555	7720	52.0	1720	9660	73.5	1840	10395	90.5
11½	1280	6350	28.5				12	1595	8955	58.4						
12	1310	7350	32.0	1460	8200	44.6										

Clockwise  
Bottom Horizontal  
Discharge



DIMENSIONS IN INCHES

Size No.	Outlet Diameter Outside								Pulleys	
		E	F	J	K	L	M	Weight	Diameter	Face
1	3½	6¼	5¼	6⅞	5¼	3½	14¼	55	2¼	1¼
2	4	7¼	6⅞	9¼	5¼	3¾	19½	75	2¼	2¼
3	4½	11¼	8¼	10¼	8¼	4¾	23	95	3	2½
4	5	13¼	10¾	13½	9¼	5¼	25¼	135	4	3
5	5½	14¼	11¼	14¼	11½	4½	24½	180	4¼	3
6	6¼	15¼	13¼	16¾	12¾	5¾	27½	265	4½	3½
7	7¼	16¼	15¼	19	14	6¼	34	308	5	4½
8	8¼	19¼	17¾	21¾	16¾	8¾	40	445	6	5
9	10	22	20	24¾	18¾	9¾	41½	635	7	5½
10	12¼	27¾	25¾	30¼	25½	10¾	45	820	8	6½
11	14¾	27½	30¾	36	29¾	11¾	50	1400	8½	7
11½	16¼	33¼	35¾	41¼	34	12¼	53¼	1900	10	8
12	18	33	35¾	41¼	34	12¾	53¼	1950	10	8

Nos. 1 to 6 have but one pulley, while all larger sizes have two pulleys, as shown above.

## Buffalo Forge Company

BUFFALO NEW YORK

In Canada: Canadian Blower and Forge Co., Ltd., Kitchener, Ont.





*"Buffalo"*

Standard  
Reversible  
Steel-Plate

# Mill Exhausters

Bulletin 2678-A

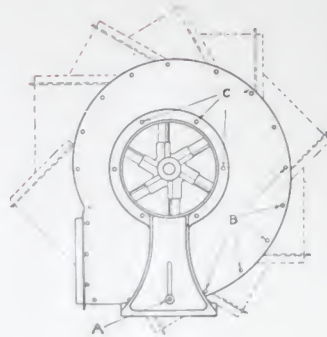
Buffalo Forge Company  
Buffalo, New York

In Canada: Canadian Blower & Forge Co., Ltd., Kitchener, Ont.

A. I. A. FILE NO. 30 D 1

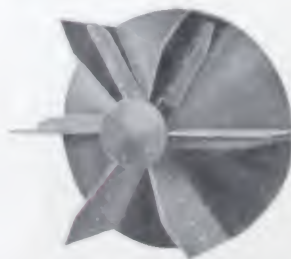


## Buffalo Standard Reversible Steel Plate Mill Exhausters



One of the most popular exhaust fans ever built, Buffalo Standard Mill Exhausters are used for conveying dust of all kinds, shavings, chips, bark, lint and many other waste materials, as well as for handling materials in process of manufacture.

These exhausters have reversible housings adjustable to either rotation and to any discharge. To change the direction of discharge, it is only necessary to remove the bolt "C" in the ring of each pedestal and take out bolt "A", then revolve the housing until the discharge points in the desired direction. To change the direction of rotation, remove the bolts "C", loosen set screws holding blast wheel to shaft, then shift the pedestals.



Special Long Shaving  
or Cone Wheel

To the mill owner this is desirable, because it is frequently necessary to change the position of the fan, due to alterations or enlargement of the piping and building. Dealers need not carry in stock fans of each rotation and angle of discharge.

### CONSTRUCTION

Heavy rolled steel plate, securely bolted together with angle irons, is used in the construction of the housing. Blast wheel is mounted upon a heavy cast iron spider. Spokes are of Tee steel, cast into the hub.

Heavy steel plates are riveted to these spokes, reinforced by securely riveted side flanges.

The bearing stand and the inlet stand use a welded steel construction throughout, which removes entirely the chance of breakage in service or in shipment. The bracing for the bearing stand is such that the rigidity is at least equal to that of a cast iron base.

When heavy, bulky or abrasive material is to be handled, extra heavy blast wheels are furnished. For handling long shavings and similar stringy material the cone type wheel is recommended.



Standard Blast Wheel

Every wheel is balanced by our special method which insures smooth running and absence of vibration, and is tested at speeds far beyond those required in practice.

Ring oiling sleeve bearings with vertical self-aligning provision are standard equipment. Extra length insures unusually long life. Ball bearings may be supplied for a small additional charge.

The design of "Buffalo" Mill Exhausters adapts itself readily to drive by direct connected motors which are mounted on a base attached to the fan housing.



Details of Buffalo Self-aligning  
Double Oil-Ring Bearings

*Buffalo*

Buffalo

Size	R.P.M.
25	891
30	747
35	646
40	566
45	499
50	444
55	400
60	374
70	321
80	281
90	245
100	222

Size	R.P.M.
25	2200
30	1836
35	1566
40	1377
45	1222
50	1100
55	1000
60	915
70	785
80	687
90	611
100	550



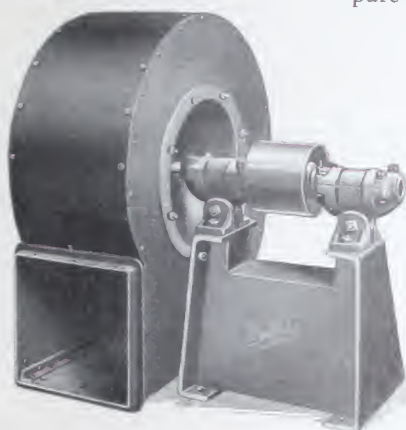
## Buffalo Direct-Connected Mill Exhausters



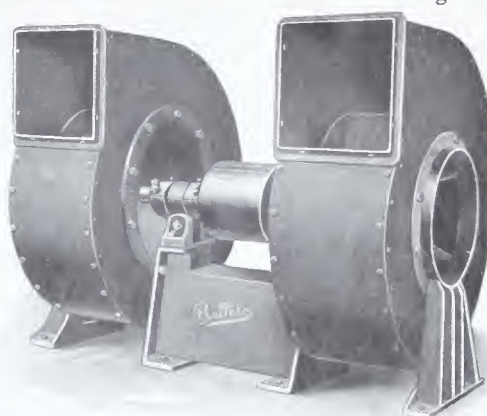
"Buffalo" direct-connected outfits can often be used to advantage since belting is avoided and floor space economized. The motor is placed on a sheet steel sub-base, rigidly attached to the housing, making a single complete unit, impossible to get out of alignment. These outfits may be mounted on platforms near the ceiling, a convenient location as it is desirable to keep the main discharge pipe close to the ceiling. In requesting quotations, give characteristics of electric current.

### RUBBER-LINED MILL EXHAUSTERS

For handling corrosive fumes, the fans can be furnished coated with pure live rubber, vulcanized to steel shaft and inside of housing.



Buffalo Standard Reversible Single Mill Exhauster,  
Bottom Horizontal Discharge



Buffalo Standard Reversible Double Mill Exhauster,  
Top Horizontal Discharge

### Buffalo Standard Mill Exhausters CAPACITIES UNDER NORMAL WORKING CONDITIONS

Size	1" Static Pressure or 0.577 Ounces			2" Static Pressure or 1.154 Ounces			3" Static Pressure or 1.734 Ounces			4" Static Pressure or 2.307 Ounces			5" Static Pressure or 2.884 Ounces		
	R.P.M.	A.P.M.	H.P.	R.P.M.	A.P.M.	H.P.	R.P.M.	A.P.M.	H.P.	R.P.M.	A.P.M.	H.P.	R.P.M.	A.P.M.	H.P.
25	898	890	.25	1270	1260	.70	1555	1540	1.29	1795	1780	1.98	2008	1990	2.78
30	747	1280	.36	1058	1815	1.01	1294	2220	1.85	1495	2565	2.85	1672	2870	3.98
35	640	1740	.48	905	2465	1.37	1109	3020	2.52	1280	3485	3.88	1430	3900	5.42
40	561	2275	.64	793	3220	1.79	972	3940	3.30	1122	4550	5.09	1255	5090	7.12
45	499	2880	.80	706	4070	2.27	865	4990	4.17	998	5760	6.44	1117	6450	8.98
50	449	3555	.99	635	5030	2.80	778	6160	5.15	898	7120	7.95	1004	7960	11.1
55	408	4300	1.20	578	6100	3.39	707	7460	6.23	816	8620	9.62	913	9635	13.4
60	374	5120	1.43	529	7250	4.04	648	8870	7.42	748	10250	11.4	836	11450	16.0
70	321	6975	1.94	453	9865	5.50	555	12070	10.1	640	13930	15.6	715	15580	21.7
80	281	9100	2.54	397	12880	7.79	486	15760	13.2	561	18200	20.4	628	20360	28.5
90	249	11520	3.21	353	16280	9.09	432	19960	16.7	499	23040	25.8	558	25800	36.0
100	225	14220	3.96	318	20120	11.2	389	24640	20.6	449	28480	31.8	502	31840	44.3

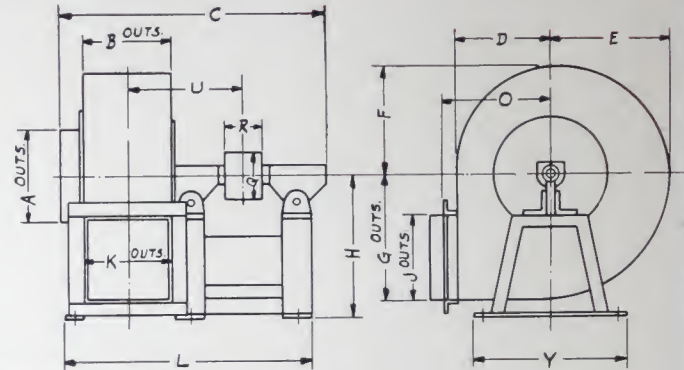
Size	6" Static Pressure or 3.460 Ounces			7" Static Pressure or 4.04 Ounces			8" Static Pressure or 4.614 Ounces			9" Static Pressure or 5.19 Ounces			10" Static Pressure or 5.768 Ounces		
	R.P.M.	A.P.M.	H.P.	R.P.M.	A.P.M.	H.P.	R.P.M.	A.P.M.	H.P.	R.P.M.	A.P.M.	H.P.	R.P.M.	A.P.M.	H.P.
25	2200	2180	3.66	2375	2355	4.61	2540	2515	5.62	2692	2670	6.70	2840	2815	7.86
30	1830	3140	5.23	1978	3390	6.60	2115	3630	8.06	2240	3850	9.62	2365	4055	11.2
35	1568	4270	7.12	1693	4615	8.97	1810	4930	10.9	1920	5230	13.1	2026	5515	15.3
40	1373	5575	9.33	1483	6025	11.8	1587	6440	14.4	1683	6830	17.2	1773	7200	20.07
45	1223	7060	11.8	1322	7625	14.9	1413	8150	18.1	1498	8650	21.7	1578	9120	25.36
50	1100	8720	14.6	1188	9420	18.4	1270	10070	22.4	1347	10680	26.7	1420	11250	31.3
55	1000	10550	17.6	1080	11400	22.2	1154	12180	27.1	1224	12930	32.4	1290	13620	37.87
60	915	12550	20.9	989	13560	26.4	1058	14500	32.3	1120	15370	38.5	1183	16200	45.1
70	789	17070	28.5	847	18430	35.8	905	19700	43.6	960	20900	52.5	1013	22050	61.2
80	687	22300	37.3	742	24100	47.2	794	25760	57.5	842	27320	68.7	887	28800	80.3
90	611	28240	47.2	661	30500	59.5	706	32600	72.7	749	34600	86.8	789	36480	101.5
100	550	34880	58.2	595	37680	73.3	636	40280	89.6	674	42720	107.0	710	45000	125.2



# Buffalo Standard Reversible Mill Exhausters

STANDARD P. M. X. SINGLE

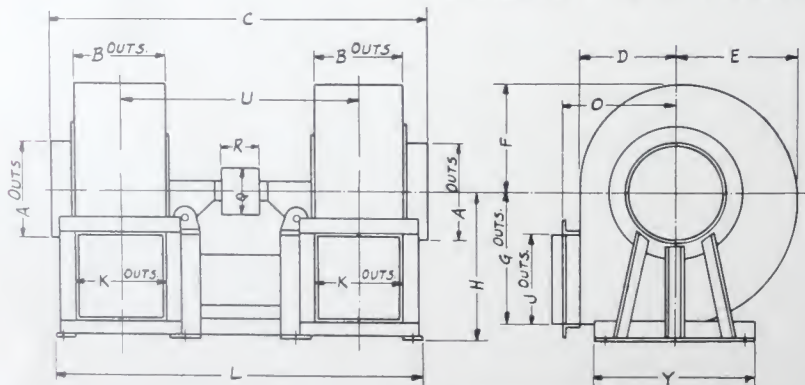
Clockwise  
Bottom Horizontal  
Discharge



DIMENSIONS IN INCHES

Size	A	B	C	D	E	F	G	H	J	K	L	O	Q	R	U	Y
25	10	9 1/2	28 1/16	9 7/8	12 3/8	11 1/8	13 3/4	15 1/4	9 1/2	9 1/2	26 3/4	11 1/4	5	4	13 1/16	11 1/2
30	12	11 1/4	32 1/16	12	15	13 1/2	16 3/8	18	11 1/4	11 1/4	29 5/8	13 3/8	6	4 1/2	14 1/16	13
35	14	12 3/4	34 1/16	13 3/8	17 3/8	15 3/8	19 1/4	20 3/4	12 3/4	12 3/4	32 3/8	15 1/2	7	5 1/2	15 1/16	14
40	16	14 1/4	38 1/16	16	20	18	22 1/8	24	14 1/4	14 1/4	35 7/8	17 3/8	8	6 1/2	17 1/16	15
45	18	16 1/4	43 1/16	17 7/8	22 3/8	20 1/8	24 3/4	25 5/8	16 1/4	16 1/4	40 1/16	19 1/2	9	7 1/2	19 1/16	16 1/2
50	20	18 1/4	47 1/16	19 3/4	24 3/4	22 1/4	27 3/8	29 1/4	18 1/4	18 1/4	44 1/16	21 3/8	10	8 1/2	21 1/16	18
55	22	19 3/8	51 1/16	21 3/8	27 1/8	24 3/8	30	32	19 7/8	19 7/8	48 1/16	23 1/2	11	9 1/2	23 1/16	26
60	24	21 3/8	53 1/16	23 3/4	29 3/4	26 3/4	32 1/8	35	21 3/8	21 3/8	50 1/16	25 1/16	12	10 1/2	24 1/16	27
70	28	25 3/8	60 1/16	27 1/2	34 1/2	31	38 1/16	40	25 3/8	25 3/8	56 1/16	29 1/16	14	11 1/2	27 1/4	31
80	32	28 3/8	64 1/16	31 1/2	39 1/2	35 1/2	43 1/16	45 1/2	28 3/8	28 3/8	60 1/16	33 1/16	16	12 1/2	29 3/8	33

STANDARD P. M. X. DOUBLE



Clockwise  
Bottom Horizontal  
Discharge

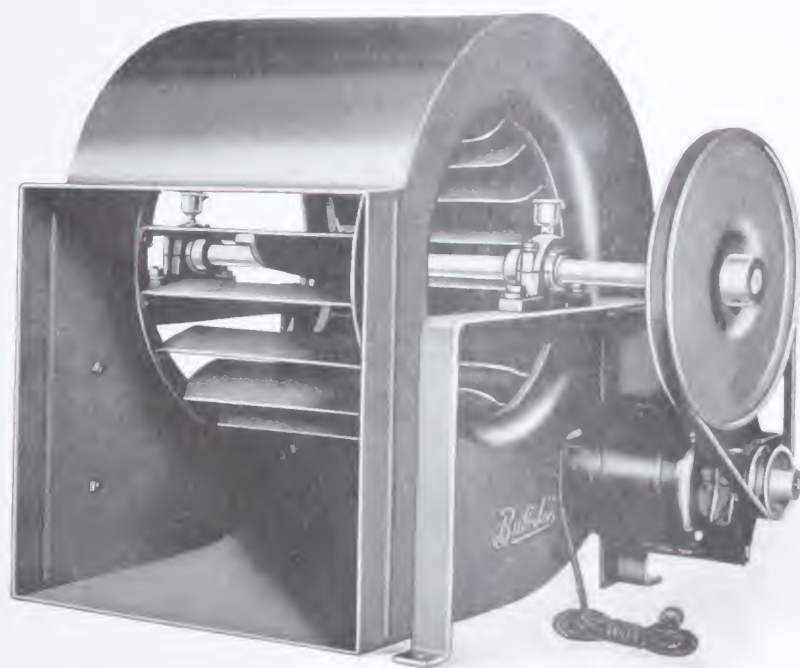
DIMENSIONS IN INCHES

Size	A	B	C	D	E	F	G	H	J	K	L	O	Q	R	U	Y
25	10	9 1/2	46	9 7/8	12 3/8	11 1/8	13 3/4	15 1/4	9 1/2	9 1/2	45 3/8	11 1/4	6	6 1/2	30 3/4	11 1/2
30	12	11 1/4	51 1/8	12	15	13 1/2	16 3/8	18	11 1/4	11 1/4	50 3/4	13 3/8	7	7 1/2	34 3/4	13
35	14	12 3/4	56 1/8	13 3/8	17 3/8	15 3/8	19 1/4	20 3/4	12 3/4	12 3/4	55 3/4	15 1/2	8	8 1/2	38 3/4	14
40	16	14 1/4	61 1/8	16	20	18	22 1/8	24	14 1/4	14 1/4	60 3/4	17 3/8	9	9 1/2	42 3/4	15
45	18	16 1/4	66 1/8	17 7/8	22 3/8	20 1/8	24 3/4	25 5/8	16 1/4	16 1/4	65 3/4	19 1/2	10	10 1/2	46 3/4	16 1/2
50	20	18 1/4	71 1/8	19 3/4	24 3/4	22 1/4	27 3/8	29 1/4	18 1/4	18 1/4	70 3/4	21 3/8	11	11 1/2	50 3/4	18
55	22	19 3/8	76 1/8	21 3/8	27 1/8	24 3/8	30	32	19 7/8	19 7/8	75 3/4	23 1/2	12	12 1/2	54 3/4	26
60	24	21 3/8	81 1/8	23 3/4	29 3/4	26 3/4	32 1/8	35	21 3/8	21 3/8	80 3/4	25 1/16	13	13 1/2	58 3/4	27
70	28	25 3/8	90 1/8	27 1/2	34 1/2	31	38 1/16	40	25 3/8	25 3/8	90 3/4	29 1/16	14	14	62 3/4	31
80	32	28 3/8	100 1/8	31 1/2	39 1/2	35 1/2	43 1/16	45 1/2	28 3/8	28 3/8	101 3/4	33 1/16	16	16	66 3/4	33



*“Buffalo”*

Type “H.V. A.”  
Forced  
Circulating Unit





# A QUIET Outfit for Forced Warm Air Circulation

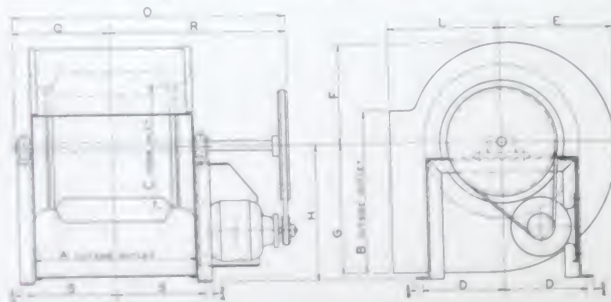
**W**ELL known to contractors for a number of years, H. V. A. Fans are now available with new one-piece motor mounting and motor for quick installation.

There is no change in the fans proper. The high efficiency H. V. A. wheel delivers a large volume of air against the back pressure encountered in the usual forced air or air-conditioning system.

Quiet operation is assured at the speed recommended. Bearings are floated on rubber insulators completely isolating the rotating parts from the housing. With the use of the recommended canvas connection from fan outlet to the duct, operating noises are reduced to an absolute minimum.

The bracket for mounting the motor is rigid and will not vibrate. V-belt drive provides adequate driving surface, with close pulley centers. Motors are resilient mounted.

No. 121 H. V. A. Forced Circulating Unit with  $1/6$  H. P. 110 volt, 60 cycle, 1 phase motor. Fan speed 490 R. P. M. Cubic feet of air per minute 800 free delivery. List \$71.00.



No. 151 H. V. A. Forced Circulating Unit with  $1/6$  H. P., 110 volt, 60 cycle motor. Fan speed 400 R. P. M. Cubic feet of air per minute 1500 free delivery. List \$85.00.

For capacities against resistances see Bulletin 2947-A.

Size	A	B	C	D	E	F	G	H	L	O	Q	R	S
121	12 $\frac{1}{8}$	12 $\frac{1}{8}$	8 $\frac{7}{8}$	8 $\frac{1}{8}$	8 $\frac{3}{8}$	7 $\frac{1}{8}$	9 $\frac{3}{8}$	13 $\frac{1}{8}$	9 $\frac{1}{4}$	23 $\frac{1}{2}$	8 $\frac{1}{8}$	15 $\frac{1}{8}$	6 $\frac{1}{8}$
151	16 $\frac{1}{8}$	16 $\frac{1}{4}$	12 $\frac{1}{4}$	8 $\frac{1}{8}$	11 $\frac{1}{8}$	10 $\frac{1}{8}$	13 $\frac{1}{8}$	13 $\frac{1}{8}$	11	27 $\frac{1}{2}$	9 $\frac{1}{8}$	17 $\frac{1}{8}$	8 $\frac{1}{8}$

**Buffalo Forge Company** Buffalo, New York

In Canada: CANADIAN BLOWER & FORGE CO., Ltd., Kitchener, Ontario







